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Leaders into Unknown Lands



LIVINGSTONE
BURTON

STUART
WALLACE

STANLEY

NANSEN

By

ARTHUR MONTEFIORE

R.G.S., F.R.G.S.

Ms. 358

Grace Church Sunday School,

OLD SAYBROOK, - - CONN.

B-N.F.

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LEADERS INTO UNKNOWN LANDS.



Ravna. Sverdrup. Nansen. Trans. Dietrichson. Balto.
DR. NANSEN'S EXPEDITION ACROSS GREENLAND.

LEADERS INTO UNKNOWN LANDS

BEING CHAPTERS OF RECENT TRAVEL

BY

ARTHUR MONTEFIORE, F.G.S., F.R.G.S.

AUTHOR OF

"H. M. STANLEY, THE AFRICAN EXPLORER," "DAVID LIVINGSTONE," ETC., ETC.



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PREFACE.

BETWEEN the covers of this book I have enclosed a short description of six of the most famous journeys of modern times. In my choice of the six I have chiefly regarded the greatness of the achievement; but, while keeping this before me, I have fortunately been able to give greater variety to the subject than I had first hoped. In modern times Africa has claimed the lion's share of exploration, and many famous journeys have been made in that continent; she therefore presses claims that it is equally impossible to overlook or deny. As a result, there are two great journeys through Africa included

in the present book—the march of Livingstone from the west coast to the east, which marked the first crossing of the continent by a white man, and the memorable descent of the Congo by Stanley, a feat which has no parallel in modern exploration.

But there have been some famous journeys in other regions of the earth. And from these I have selected the intrepid journey of the late Sir Richard Burton—one of the greatest, as he was the most accomplished, of the travellers of the nineteenth century—to the Holy Cities of the Moslem, in the guise of a pilgrim; a journey which was attended with the greatest risk, and only rendered possible by a complete mastery of Arabic, of Arab custom, and of the minutest details of Mahometan practices. Next, I have selected the great and finally successful work of Stuart, in Australia, who in his first attempt to cross that continent of surprises reached a point within 250 miles of his goal; nothing daunted, he again started from the shores of the Southern Ocean, and on this occasion came within 150 miles of the waters of the Indian; and finally, in his third journey, he conquered all difficulties, and crossed the continent from shore to shore. The pluck shown by him in what was practically six journeys across the continent is only equalled by the magnitude of the distances he covered. And then there are the travels of Alfred Russel Wallace about the many beautiful islands of the Malay Archipelago, travels which were extended over a number of years, and resulted in a vast accumulation of discoveries in the department of natural history, several of them being of the highest importance. As co-discoverer

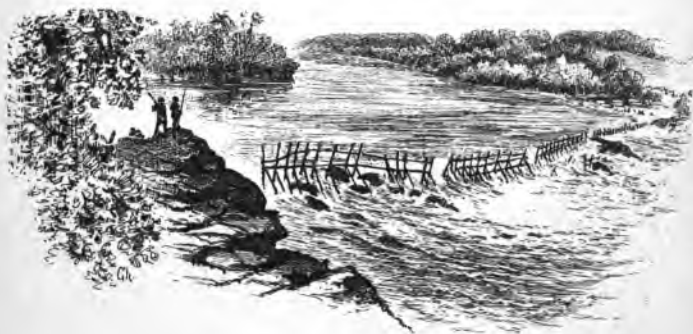
of "Darwinism," Wallace's rank as a naturalist is supreme ; but I doubt whether his well-known views on the origin and variation of species would ever have been formulated, had he not laid, in the course of his most productive researches in the Malay Archipelago, so firm a foundation of facts on which to base his theories. And, finally, there is that famous journey which marks the first crossing of the great white mantle of Greenland by the young Norwegian naturalist, Fridtjof Nansen ; in the course of which he and his companions displayed a courage, tenacity, and skill, which proved them to be possessed not only of the "heroic rage" of those Vikings from whom they sprang, but also of that scientific thoroughness which is the characteristic of modern times.

It is obvious, of course, that such a book as this must owe a deep debt to the men whose travels it describes ; it is obvious that, had they not published a detailed record of their journeys, this book could hardly have been written. But I venture to express a hope that there will be found in its pages some trace of acquaintance with modern exploration, and, here and there, of my personal knowledge of several of the scenes I describe. At the same time I desire to express my great obligations to the following works :— "Missionary Travels" (Livingstone) ; "A Pilgrimage to El Medineh and Mecca" (Burton) ; "Explorations in Australia" (Stuart) ; "The Malay Archipelago" (Wallace) ; "Through the Dark Continent" (Stanley) ; and "The First Crossing of Greenland" (Nansen). If any one wishes to follow up the acquaintance to which this book may serve as an introduction, he can-

not do better than read the famous records of these Leaders into Unknown Lands in the books to which I have referred.

I may mention, in conclusion, that in writing these sketches I have endeavoured to bear in mind that large class of readers to whom the story of discovery, achieved and adorned by the admirable qualities of persistence and pluck, has ever appealed. These sketches, in fact, have been written for the general reader ; to the general reader, therefore, I leave their consideration.

ARTHUR MONTEFIORE.





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LIVINGSTONE'S MARCH ACROSS
AFRICA.



DAVID LIVINGSTONE.

LIVINGSTONE'S MARCH ACROSS AFRICA.

1854—1856.

IT has been the problem of the nineteenth century to explore Africa. It will be the task of the twentieth century to civilise it. But it would be an injustice to many great travellers—whose deeds place them among the greatest of explorers, and whose persistent pluck and undaunted souls require us to call them heroes—if one did not remember, and whenever opportunity serves make it known, that Africa has been for centuries the El Dorado of many a gallant pioneer, as it has also, and far too often, been his grave. Too long has it been the Dark Continent, but it has also been the Continent of Hope; its *Ultima Thule* indeed, is still known as the Cape of Good Hope. When Pharaohs administered their tyrannies, and Phœnicians braved such seas as they knew; when Greek, and Roman, and Carthaginian turned their covetous eyes southward in quest of empire; when, later, Arabs settled on the east coast, and brought back with them, so characteristically, fabulous tales wherein Oriental imagination supplied what their adventures had lacked; when, still later, the Portuguese not only explored the west coast, rounded the Cape of Storms, and formed settlements on the shores of the Indian Ocean, but so long ago as three hundred years navigated the lower waters of the Congo, and approached the interior—even then, in the

fifth century before Christ, as well as in the fifteenth after Him—Africa had her wooers; men who sought her mysteries as they had sought those of the Oracle at Delphi, of the soothsayers of Egypt, or of the astrologers of the Middle Ages; and who, as often as not, succumbed to her fascination as readily as they had followed the beckoning finger of a Fate they supposed divine.

And in a period far less remote we find the pioneers still fighting their way through the darkest barbarism known to civilisation. We must not forget—it is the nation's duty to our once powerful ally to insist on remembering—that, in matters of Africa, before England came, Portugal was. There is no need to recount the deeds of Diego Cam, of Dias, of Da Gama, for much of what they and their immediate successors achieved was wiped out in the obliviousness of a moribund Power, and during the present century their discoveries have had to be discovered again. But to deal only with the explorations of the Portuguese in this age would require a longer chapter than I am going to write on the most famous of the many journeys undertaken by Livingstone. Da Costa's expedition of 1802 started from Angola, and by way of the head-waters of the Congo made the Zambesi at Tete; in 1831 Monteiro passed from the highlands of Angola to the highlands of Nyassaland; seventeen years later Coimbra crossed the continent from the Indian to the Atlantic Oceans. Silva Porto, in addition to many explorations which carried him through the country traversed by Livingstone, also crossed the continent from west to east; and to this brief list I might add many names. Brief as it is, it will suffice to show that in African exploration we were not first. But just where Portugal and the Portuguese temperament fail, England and the Anglo-Saxon character succeed. The energy of administration, the development of resource, the thoroughness of government, and the equality of justice which characterise British control, are not conspicuous in that of

Portugal. That desire to regenerate the native, or at least to bring him nearer to the civilisation of the white man, which may be said to be the distinguishing feature of England's attitude to savage races, is absent in that of Portugal. In short, in comparing our dealings in Africa with those of the Portuguese, we are at the same time sharply contrasting the ethnological characteristics of a Romance and a Teutonic race. Two races, essentially different, have attempted to solve a problem of the highest difficulty. So far, the English race has approached the nearest to the solution—in all probability it will accomplish it—and this it is which makes the travels, discoveries, observations, and conclusions of our own pioneers in that vast continent so especially interesting. We see that they are probing the wounds which barbarism, fetishism, intertribal warfare, and above all, the horrors of the slave-trade have inflicted, and we naturally think that from them we shall learn the right remedy to apply. And this interest is of the keenest kind when we listen to what such a man as David Livingstone has to tell—"a man who dare not lie." His life was spent for Africa. "Africa, his own dear Africa, with all her woes, and sins, and wrongs," was the scene of his life-long labours, of a career as unselfish as any this century, or the centuries gone, has to show; a career originating in apostolic zeal, maturing in missionary devotion, and expiring, in his loneliness by the drear waters of Bangweolo, in the dying prayer: "May Heaven's rich blessing come down on every one—American, English, or Turk—who will help and heal the open sore of the world!"

To give a short sketch, then, of perhaps the most famous journey which this traveller—bold to fearlessness in that perfection of trust which casteth out fear, and "rich in sweet humanity"—ever made, is my present intention; and, as a preliminary, it may be as well just to fix the main points in his career preceding and leading up to this journey.

In 1841 Livingstone began his missionary work in Bechuanaland, and after labouring with varying success among different tribes of the Bechuanas at Mabotsa, Chonuane, and Kolobeng, he was led by his humanitarian foresight to seek, to the north, some outlet for the trade of the people among whom he had made his home. As I have written in my short life of Livingstone,* "he had by that time discovered the growing enormity of the slave trade, which prospered wherever the Arabs, coast-tribes, and Portuguese had access; and to stamp this out became one of the ruling passions of his life. With a statesmanlike appreciation of the case, he saw that if he could foster legitimate trade, that in human flesh would probably subside. If the tribes of the interior had nothing to exchange for those cottons and guns, bright tinsel ornaments, beads, and wire—which were displayed so temptingly before their eyes, and which they naturally coveted—but the men, women, and children they had captured in their tribal wars, or, failing these, even their own kith and kin, then, as Livingstone saw plainly, their uncontrolled greed would lead them to trade in slaves. In his anxiety to suppress this growing traffic he sought an outlet for such raw material as the natives could be induced to gather. His search for some great natural highway to the ocean led him first to Loanda on the west coast, and from there to Quilimane on the shores of the Indian Ocean."

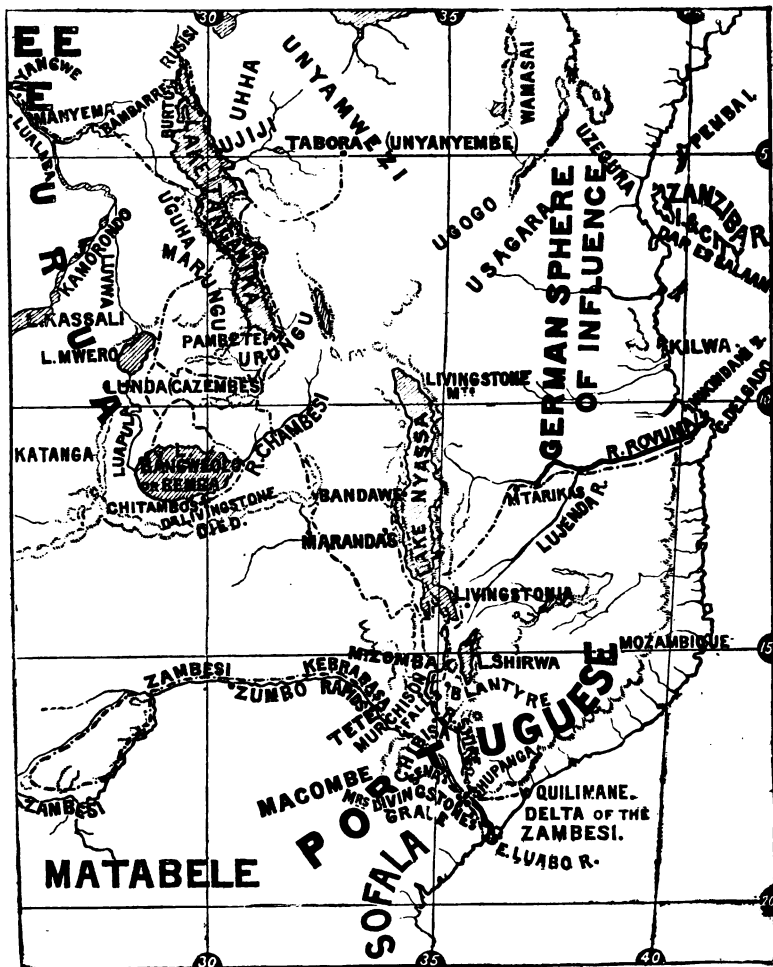
But it first brought him, in 1849, to cross the great Kalahari desert, and then to discover Lake Ngami and the rivers which flowed in that region, features which, after years of struggle in an almost waterless country, led him almost to exaggerate their value—if in this respect exaggeration can exist. In 1851 he reached the capital of the then famous Makololo—now dispersed—and at the end of June he arrived at Sesheke, and at the same time beheld the Zambesi in the heart

* "David Livingstone: His Labours and his Legacy." London: Partridge & Co.

of Africa. This was a discovery new indeed to European cartographers, for up to this time the Zambesi had been supposed to rise comparatively near to the coast, and no one of the Portuguese travellers who had crossed its head-waters, or had navigated its delta, had supposed that it flowed almost across the continent. Yet here was the Zambesi, in the heart of that continent, and even at this point a wide and deep river. For Livingstone writes in his journal: "The river was at its lowest, and yet there was a breadth of from three hundred to six hundred yards of deep flowing water. At the period of its annual inundation it rises fully twenty feet in perpendicular height, and floods fifteen or twenty miles of lands adjacent to its banks."

Here, then, was the natural highway for which he was searching—here the means of reaching certainly one ocean. But Livingstone was thinking of the west coast as being on the route to England. The needs of the English he well knew; well did he know, too, that England would be ready enough to trade with his Bechuana and Makololo friends, if they, on their part, could bring their wares within reach of her ships. Westward, therefore, he looked for delivery; and westward, towards the end of 1853, he turned his steps.

With the help of Sekeletu, the chief of the Makololo, from whose subjects he selected his escort and baggage-carriers—though, to tell the truth, his outfit was slight enough—he was able to make preparations sufficient for the journey. He followed the course of the Zambesi, travelling through the densely-peopled Barotse valley, and keeping to the river and its head-waters as far as Lake Dilolo. Thence he steered in a north-westerly direction across the Basonge country, continually climbing higher and higher, until at last he looked down over the fair province of Angola, and beheld from afar the blue waters of the Atlantic. The descent to Loanda was soon made, and he entered that settlement, worn with disease and weary with travel, on the 31st of May, 1854.



CENTRAL AFRICA.

indicated thus ———

When Livingstone arrived at St. Paul de Loanda, early in 1854, and terminated his several years' wanderings in South Central Africa by an illness so long and severe that he arose from it "a mere ruckle of bones," it might have seemed that a period of rest had come at last, and that he would avail himself of the offer of a captain of an English ship to take him to St. Helena—in those days, a regular port of call on the ocean highway to India. Livingstone was in wretched health, he had accomplished much travelling and exploration, and he had preached his message when and where he could; now, at any rate, the opportunity had arrived for him to rest from his labours and seek, during a sea-voyage, and in the invigorating climate of his native country, for the return of that strength which was so essential for the successful prosecution of his various objects.

But there remained an obstacle which many might have overlooked. He had brought his companions from the country of the Makololo; he had, with their help and in their company, followed up the Zambesi to Lake Dilolo, and thence struck across the mountains of Angola to the coast; he had encountered tribes which proved friendly enough, but there were others with whom the patience and diplomacy of the white man had alone prevailed to clear a way. To send his faithful Makololo back through the countries of these hostile natives was to despatch them on a journey which would be attended with bloodshed, and in all probability end in failure. To Livingstone it appeared that his duty lay in escorting the Makololo home; to that eagle eye of his this duty loomed so clear that he had no regard for his eyrie in the far North Sea, and as the prevailing note of his long life spent in Africa, and for the African, may be sounded and completed in the one word "Duty," it is not surprising that he resolutely set his face eastward, and prepared for the march to the heart of the continent.

It is a source of satisfaction that this unselfish

devotion to duty produced a result which must be regarded as in no way short of a personal triumph. For while his main object was to restore the Makololo to their homes, Livingstone had another purpose, that purpose which had first brought him to the Zambesi, and which he was to pursue in after years until it was finally attained in the highlands of Nyassaland. In a word, he was in search of an elevated region in tropical Africa where a colony of English missionaries might settle, without injury to health, and whence the great work of civilising, and ultimately evangelising, the heathen millions might issue and spread. In his search for this he was led step by step, in journeyings often, and in perils by water, by land, and by robbers, right across the continent of Africa; and, on emerging on the shores of an Indian Ocean, earned for himself the honour of being the first white man to cross the Dark Continent.

And this journey was so fraught with interest, and so fertile of discovery, that it has ever since been regarded as one of the greatest exploits in modern travel. Naturally, then, it finds an honourable place in a volume which holds between its covers the story of the most signal events in the history of recent exploration. Its record cannot be given here in full, but I will sketch the main incidents of the journey, and dwell here and there in detail on those which are especially characteristic of the difficulties which lay in the path.

Leaving Loanda on September 20th, 1854, Livingstone proceeded to the mouth of the river Bengo, which he then ascended. On reaching Golungo Alto—and with it the first hills of the Angola Range—he took to the track and slowly climbed to the summit of the mountain range. On the low-lying lands in the valley of the river, sugar plantations flourished; and on the long sloping shoulders of the highlands, plantations of coffee, league upon league, alternated with those of cotton. But in spite of the comparative richness of

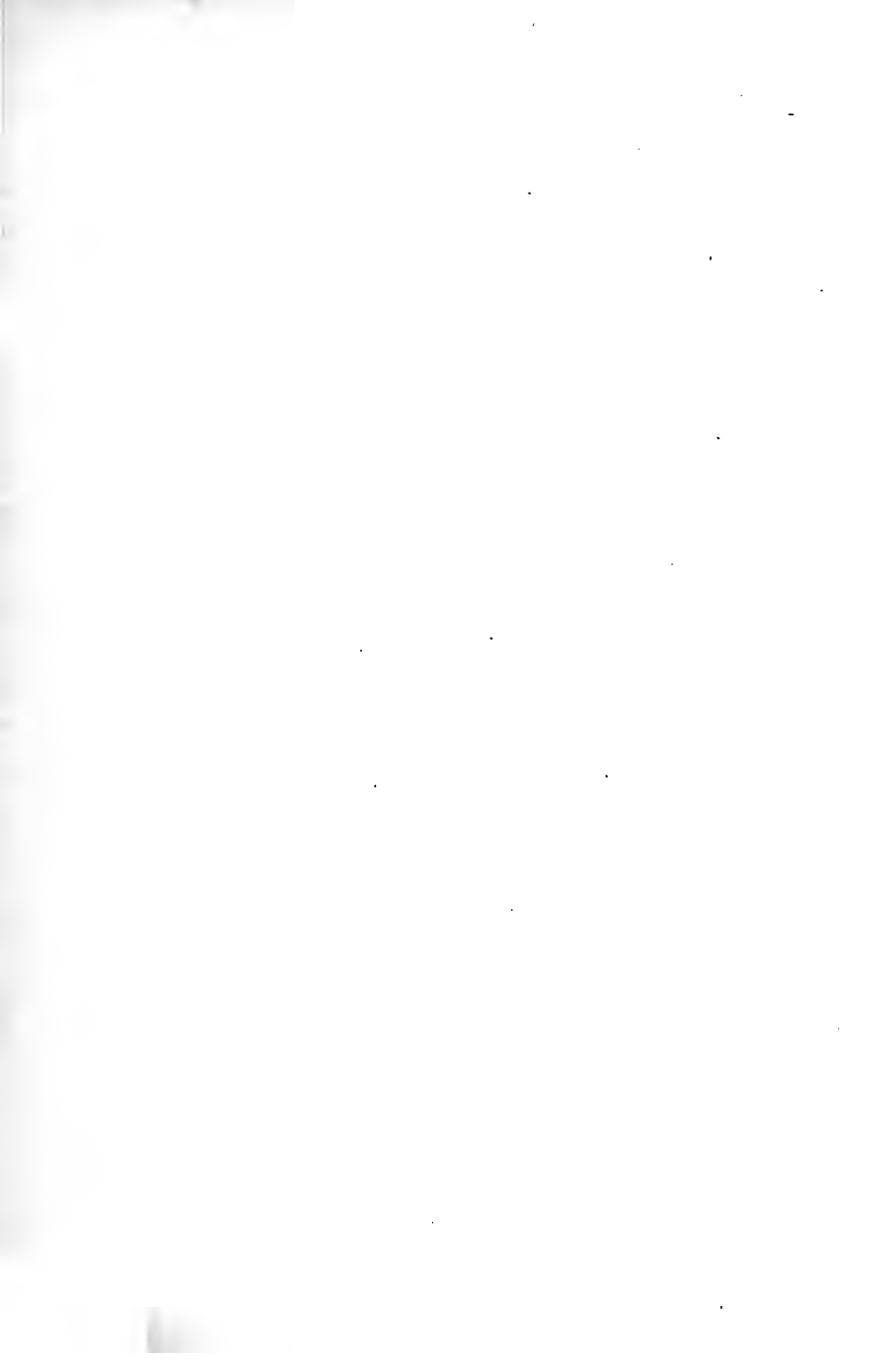
the soil, the Portuguese of Livingstone's time took little advantage of it. The very coffee plantations were the work of the Jesuits, who in earlier times had been indefatigable colonists. With one or two notable exceptions, Livingstone found the Portuguese blind to the fortune that Nature had laid at their feet. Even his native followers were surprised at this apathy. They despised the common breeds of cattle, and wondered at the general neglect of the soil. Finding that most of the flour that was used was imported, they exclaimed: "Are these people ignorant of tilling?" And noticing how wrapped up in bartering the Portuguese were, the Makololo declared that these Europeans knew nothing but buying and selling. "They are not men," was their general verdict.

After passing down the eastern slopes of the Serra de Talla Mungongo, and crossing the valleys of the Coango and Kasai—tributaries of that Congo on whose head-waters he was to spend his latest years—Livingstone entered a country of grass. Not grass as we understand it, but that tall, strong tropical grass which stands as upright and stiff as cane, and which cuts the hands and feet that would thrust it aside, as if its edges were of steel. And here, naturally, he found the villages further apart, the tracks less marked, and the people more timid at the sight of the white man. As he approached them they would run back into the tall grass, and cower there until he had passed. They would peer at him from their doorways, and shrink back into the gloom of their huts as he came nearer. The children would shriek aloud as if they had seen a ghost, and the very dogs would bolt away with their tails between their legs as they would from a lion.

Soon, however, the scene was to change. As the Zambesi was approached the narrow valleys and elevated watersheds of the Kasai and its confluent streams gave way to long stretches of level plain, with pools of water (legacy of the rainy season) in the hollows. Morning was heralded by the song of larks, sable clad,



ANIMAL LIFE ON THE ZAMBESI RIVER.



save for yellow-tufted shoulders; swifts and swallows swooped through the air in pursuit of their insect food; dragon-flies darted from pool to pool, and gorgeous butterflies reeled from flower to flower; duck and teal, crane and flamingo, haunted the reeds of the marshy tracts, and, blurring the horizon, herds of buffalo, giraffe, and elephant moved slowly along in ever interchanging order. And as if to accentuate the change still farther, in place of the tall and well-nigh impenetrable grass, there stretched away as far as the eye could reach a glowing carpet of flowers of many hues. Here spread myriads of yellow blossoms in every shade of that glorious colour; pale with the pallor of lemon, and tawny with the burnish of gold. A few steps farther all sign of this ceased, and a wide belt of blue flowers blossomed in its stead, again in every tone of that colour. Not once, nor twice, but many times were these bands of colour repeated, and with the hue of the flowers the colours of the birds also changed. But, in spite of the beauty of landscape and the abundance of life, here, as everywhere in tropical Africa, there lurked the demon of disease. Over the fairest scenes of that continent of surprises and disappointments the spectre of malaria throws a deadly gloom; the paths of the explorer, the missionary, and the trader, can be traced by the long line of their graves. And Livingstone, one of its greatest explorers, and perhaps the most dramatic figure among its missionaries, was not exempted from the common penalty. In the midst of this garden of tropical splendour he was struck down with a severe attack of fever, and rendered, for a time, powerless to move forward.

On arriving at Lake Dilolo for the second time—for he was now about to re-tread the portion of his western track between Sesheke and that lake—a very important point in Livingstone's career, and the history of the development of Central Africa, was reached. Through his having made a northern divergence on crossing the last range of the mountains of Angola, he

had been traversing the valleys of the Kasai, Lotembwa, and other rivers, which flowed in a northerly direction. He had now arrived at the lake, and issuing from it were the waters of the Zambesi. Thus he had reached a point some 4000 feet in altitude, whence flowed the waters of the two great river systems of Central Africa—to the north the Kasai and its sister streams emptied into the Congo, and thence flowed into the Atlantic Ocean, and to the south and east the Zambesi swept in one great volume to its delta on the shores of the Indian Ocean. And as at this time he knew nothing about the real source of the Congo, and the wonderful chain of lakes through which its head-waters run, it is not a little remarkable that he should have formed a theory, the truth of which many years of subsequent exploration proved.

Moreover, there was yet another fact which Livingstone now established. This was the elevated trough form of Central Africa. Between the Kasai and Lake Dilolo stretched the plains already described. The whole elevation of the country was well below the Angola mountains. Similarly, he had learnt from native report that far away to the eastward other rivers flowed north, hemmed in by ranges similar to those he had crossed. With one of those sudden revelations which come occasionally to scientific men, and clear up in a moment the doubts of a century, he realised the formation of Central Africa. At home, Sir Roderick Murchison had conjectured that such would prove to be the case; here, while standing between the mighty twin-rivers, Livingstone realised the truth of that conjecture. Henceforward this knowledge would direct explorers in their wanderings through Africa, and enable the theorists to predicate with some accuracy the hydrography of the continent. One link was still missing, however; the eastern limits of the central plateau had to be defined by personal observation. It fell to Livingstone's lot to discover this link, the first contact with which he

made when, as we shall see, he came to where the stupendous Victoria Falls marked the eastern rim of that central trough. Thus Livingstone may be claimed to have solved a geographical question of the first importance at this early stage of his journey down the Zambesi.

Livingstone journeyed on down the Leeba without any special incident, but shortly after passing the confluence of that river with the Liambai, he had a very narrow escape from destruction. While walking alone, on the plain which extended from the banks of the river, he was surprised by the sudden charge of a buffalo that had been disturbed, and consequently enraged, by the movements of the Doctor's followers. Around him spread the grassy plain—the only tree in sight was too far off to be reached. Quietly cocking his rifle, he waited till the huge beast should come near. Just as the buffalo came within a dozen yards or so, something caused it to swerve. With sportsmanlike smartness, Livingstone sent a bullet in at the shoulder at the same moment, and flung himself on his face. The brute charged past him into the water, and there fell dead.

Nor was this the only adventure that Livingstone met with at this time. For, a short while afterwards, on leaving Naliele in the Barotse valley, and while quietly paddling down the river, the canoe was flung out of the water by a hippopotamus, which butted it from underneath. Its occupants leapt into the river and swam ashore; a sufficiently risky performance with crocodiles and hippopotami as bathing companions.

In connection with this incident, it may be mentioned that when Mr. Horace Waller recently complained of the uncertainty of the mails from Nyassaland, and seemed rather more than willing to impute the delays and losses to the meddling of the Portuguese, Mr. H. H. Johnston, our consul-general on the Mozambique Coast, replied that these delays and losses

were to be attributed to the hippopotami, and not to the Portuguese officials. The mails were brought down the Zambesi and its affluents in canoes, and such an accident as here happened to Livingstone was to this day a common one to Her Majesty's mails.

And this explanation is borne out by the experiences of many travellers in Africa. Sometimes, too, the hippopotamus, which is more often stupidly than intentionally aggressive, displays a vicious rage, and this in a beast of his formidable dimensions is a serious danger. Sir Samuel Baker, in his really excellent "*Wild Beasts and their Ways*," cites several instances of the ferocity of the hippopotamus—for only one of which I can now find space. One day, when encamped on the banks of the White Nile, he was visited by an old blind sheikh from the country beyond the river. This old man was paddled across the Nile in a light ambatch canoe by his son. He crossed safely enough, and had a satisfactory palaver with Baker Pasha. On the return journey, however, just as the canoe was approaching the middle of the stream, a huge bull hippopotamus suddenly arose from the still depths of the river, and without a moment's warning grabbed the frail canoe in his jaws. He splintered it into pieces and simultaneously killed the old sheikh. The son, by the merest chance, escaped from the devouring jaws of the hippo and swam his hardest to the shore, where Sir Samuel, who had been a spectator of the attack, was ready to help him out.

At last, in September 1855, and a year after setting out from Loanda, Livingstone and his followers reached Sesheke and the country of the Makololo. A few days later they marched into Linyanti—the town from which they had started for the West Coast about two years before. The enthusiasm with which they were greeted was boundless, and the wonderful tales these wanderers had to tell were almost equally without limit. Ulysses and Jason were pigmies compared to these Makololo Argonauts; they had reached the end

of the whole world, and had only turned back when no land remained. And the presents that had been brought from Loanda received the most awe-struck attention. Sekeletu, the Makololo chief, and one of Livingstone's most faithful friends in the course of a



THE ENCOUNTER WITH A HIPPOPOTAMUS.

life, in which he made many such among the natives, was especially honoured by the present of a military uniform which had been sent by the authorities of Loanda, with a lively sense of possible favours—or profit—to come. In short, the home-coming of the Makololo was a triumph, and the report they gave of their leader was so favourable that he had plenty of

volunteers to accompany him when he resumed his march down the Zambesi.

Livingstone stayed for a while with his old friends, in order to escape the rigours of the rainy season, and this is, therefore, a good opportunity for recalling what was his conception of the character of this, the most important tribe on the Upper Zambesi in those days. With that judicial impartiality which ever showed itself in his opinions, he summed up both the good and the bad, and drew comfort and warning from each. That the Makololo were faithful he had amply proved in the journey to and from Loanda, and further confirmation was found in the careful way in which they had preserved such goods as he had left at Linyanti two years before. That they were often gifted with the quality of mercy he also concluded, from the benevolence with which orphan children were at different times reared by kindly neighbours, who adopted them as their own. On the other hand, the most wanton cruelty was frequently shown to the poor and friendless. When such fell ill they were sometimes left to die, or recover alone as best they might, and when they died they were dragged out of the town into the bush, there to be devoured by hyænas. The children who were captured, or who belonged to tribes that had been subdued, were frequently left to die of starvation. And consequently, as Livingstone himself said, it would not be difficult to make these people appear excessively good or uncommonly bad.

On resuming his journey down the Zambesi, which, by the way, means the same thing as the word Liambai—that is, the *river*—Livingstone explored some of the larger islands which lay in the bosom of the stream. On one of these he found the graves of two chiefs who had been entrapped and killed by Sebituane, a former king of the Makololo. Around one grave was a barrier of poles, each pole surmounted by a human skull. Beyond these lay a large heap of hippopotami

skulls, with the tusks intact! The grave of the other chief was embellished with no fewer than seventy valuable elephants' tusks!

Livingstone was now approaching the great falls of which the natives had told him so much. They had spoken of this "sounding smoke," and asked him if such existed in his country. The native name was Mosi-oa-tunya, which, being interpreted, is "smoke does sound there."

The approach to the falls is of extreme beauty. On either hand the valley trends upward in a gentle ascent to richly-wooded hills. Palm trees, silver cedars, and dark-leaved cypresses contrast finely with one another in the near foreground, but are dwarfed by the ponderous bole of the baobab, which here, as everywhere in Africa, makes all the surrounding vegetation appear puny and stunted. The river widens out as it sweeps along to its gigantic leap, and the islets which spangle its glittering surface give an appearance of repose and calm, which the ever-increasing roar of the cataract warns us to be deceitful. And, looking in the direction whence the sound is booming, the gaze is held by a phenomenon which is only here seen—though you search the wide world over—in its picturesque entirety. Swirling columns of white mist arise from the falls, and, when the air is still, soar straight up into the blue expanse of a cloudless sky. But when the wind sweeps across the valley, and the frequent thunder-cloud hangs low above the river, these columns twist and bend with the gusts of air, and hide their expanding heads in the gloom of the cloud.

There is a weirdness in their aspect which places the rich loveliness of the landscape in the sharpest contrast, and imparts a feeling of mystery and awe, which the natives well express by offering praise and prayer to their gods whenever they behold it. And when the clouds are riven, and the fierce rays of the sun once more illumine the ever-rising pillars of mist, then

the natives exclaim, in their ignorance and wonder, that this, surely this, is none other than the abode of God, the gate of heaven. And yet, and because of their ignorance, the Batoka would sing as they drew near to the mysterious scene in their canoes:

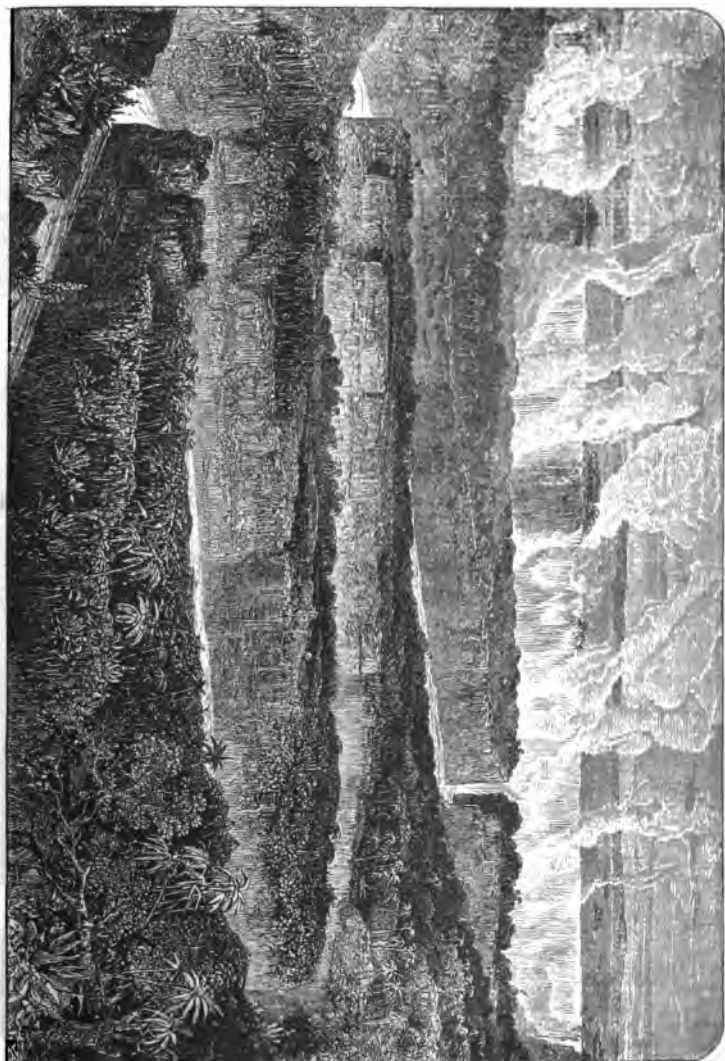
“ Ah ! the Liambai ! nobody knows
Whence it comes and whither it goes ! ”

“ Whither it goes ! ” Perhaps they might well sing that. For after paddling cautiously down in mid-stream to the island that lies on the very verge, and thence creeping round to where it touches the edge of the fall, they would look down upon the river at the foot, rushing away through a narrow cañon, so white with turmoil and so far below that it seemed like a stretched white cord vibrating from a heavy blow. The great wide river leaps into the fissure, more than a mile in breadth; the next moment it is caught by the rock precipices that close in on each side and rear an immovable wall in front, and are thus compressed into a boiling, seething, leaping flood, but a score or so of yards in width. And this great crack—for a crack it simply is—is extended from the right bank of the Zambesi across the width of the river, and away through a rock-bound country for more than thirty miles. Is this imaginable for one who has not seen it? Let us make use of Livingstone’s homely simile, and across the bed of the Thames, at the bend by the Surrey docks, rive a chasm several hundred feet in depth, but only twenty yards in breadth, from the Surrey to the Middlesex shore. We must take away the Thames mud and the London clay, and in their place have black basaltic rock. And this chasm must not end when it reaches the Middlesex shore, but cleave through it, and the whole city and country beyond it, away through Epping Forest, and on in zigzag fashion to the very borders of Suffolk and Cambridgeshire. Then let us take our stand on the Thames Tunnel Pier, and see the great river plunge

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THE VICTORIA FALLS.

[From Dr. Livingstone's "Zambezi."





with one unbroken leap into this fissure, and turn and rush, roaring and boiling, away on its mad career. And even then, could we see such a sight as this, we should only have a poor reproduction of the Victoria Falls.

And this was the discovery which may be regarded as the culminating point of Livingstone's journey down the Zambesi. Just as when, in company with Mr. Oswell in former years, he had discovered the Zambesi in the heart of the continent—whither it was not supposed to penetrate—so here, alone, he made the discovery of the falls of which no tidings had ever filtered down to the Portuguese who were settled in the delta. And the discovery had a scientific significance which Livingstone was not slow to perceive. For he now recognised the meaning of the more or less soft tufa soil which existed between Linyanti and this point, and of the fresh-water shells that were thrown up by the ant-eaters, in their burrowings. This tract of country had at one time been a fresh water lake—which had found an outlet here in the falls, just as the Congo had escaped to the sea by the cañon below Stanley Pool, and the Orange River by the gorge between the Great and Little Nama Lands. Further proof of this theory may be found in the curious absence of marked watersheds between the affluents of the Zambesi. They run through a low country, furrowing and channeling their way according to the general slope. Just as the tiny rills course through the exposed mud of a dried-up pool, so these rivers cut the desiccated bed of what was once a vast fresh water lake. The general character of the region is full of signs that point to the former existence of such a lake; the chasm that begins at the Victoria Falls explains why that lake disappeared.

At this point in his journey, and on account of the tse-tse fly, which here made itself very troublesome, and of the rocky nature of the banks of the Zambesi

cañon, Livingstone diverged to the northward, and crossed the country lying between the falls and the confluence of the Kafue with the Zambesi. In this cross-country march he met with a large number of those soldier-ants which are so characteristic of African scenery. They and their foes, the white ants, are well worth noticing as we linger with Livingstone in his investigation of the natural history of the region.

The soldier-ants are clad in a uniform of black, tinged with grey. They are about half an inch in length, and are armed with a prodigious sting. They march in strict regimental order, four abreast, and obediently follow those who are their leaders, and who play a very curious part in the economy of the soldier-ant world. It is nothing less than that of butcher. The white ant is their special prey, and when the soldier-ants come upon a colony of the white ants, their leaders seize the unfortunate white ants, throw them into a state of insensibility with a single sting, and then toss them aside. Their followers seize these victims and bear them off in triumph to fill their larder; for the soldier-ants are cannibals, and it is their opinion that, with the exception of head and legs, the white ant makes very good eating. It is not a little curious that the leaders should be exempt from carrying their victims; that, however, is left entirely to their subordinates.

Whether it is that the ants with the largest stings are made the destroyers, or whether their prerogative of destruction has, on the evolution principle or that of "practice makes perfect," made their stings more effective, it is worth noticing how, even in their minute world, might has been yielded right, and the one most capable of killing has been awarded the position of commander.

But if it were not for the cannibal propensities of the soldier-ants, the white ants would increase and multiply enormously, and probably that would upset

the balance of their usefulness. For useful they are. Just as the red ant seems to exist in order to remove all decaying animal substances, so does the white ant busy himself with vegetable matter. The decomposing vegetation is taken charge of, cut up into minute portions, and buried. What a boon this is in a sufficiently malarious country a moment's reflection will tell us. And Livingstone, who carefully noted the habits of these creatures, tells us that the unanimity with which they work is hardly short of the marvellous. In building one of the galleries which make their homes, he saw hundreds of ants beating it smooth, in perfect time, and apparently in accordance with a signal. At another time, he saw large numbers rush out of their castle, and cut down a large patch of grass. The sound of their mandibles, as they sawed away at the blades, was so loud that he could have believed it was the sigh of the wind as it rustled the leaves of the trees. Their "hills" are met with so frequently that in some parts they remind one of haystacks in a field. Often, too, they are as much as one hundred and fifty feet round, and some thirty feet high.

Another curiosity of nature which Livingstone noted was the buffalo-bird. He relates how a herd of buffaloes rushed past him at full speed, with an old buffalo-cow leading them by nearly a length. On the withers of this recognised leader of the herd were perched about twenty buffalo-birds. These birds always accompany a herd, much as starlings accompany rooks. It is possible that they may find their food in the same place, and under the same conditions, but it is more likely that the maggots with which the buffaloes' skins are infested are a very considerable attraction. However that may be, it is certain that the buffalo-birds do sentry duty for the herd. At a sign of danger they fly up into the air, and the buffaloes take alarm and stampede accordingly. Sometimes the birds will accompany them on the wing, and

sometimes they will perch on their backs, and with unrelaxing tenacity keep their seats, if seats they can be called.

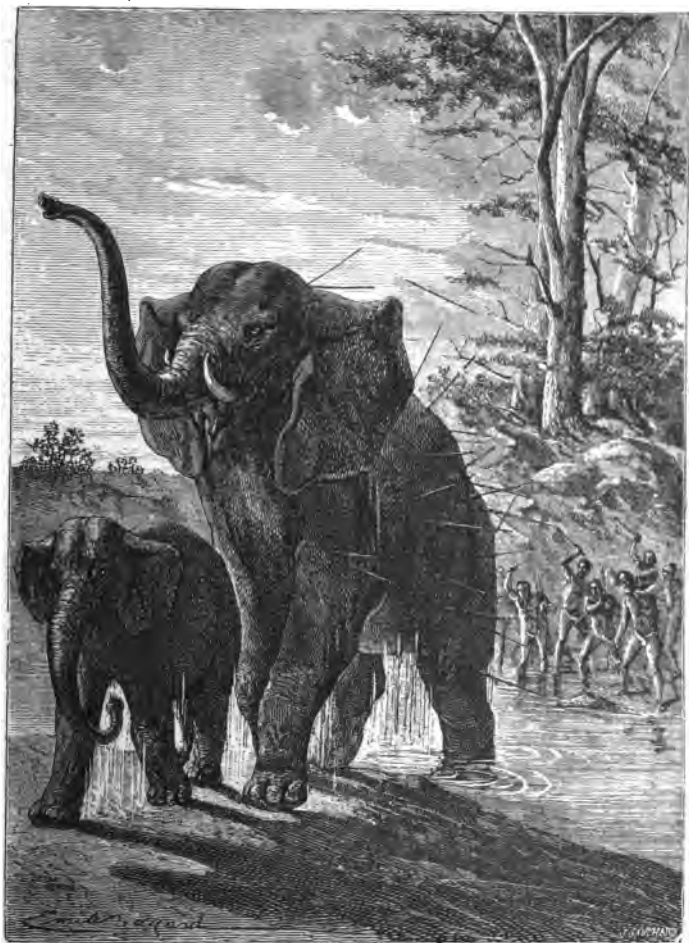
After passing through some unfriendly tribes, Livingstone met with the Batonga, who were very numerous, and fortunately very amiable. Their mode of greeting was, to say the least, slightly peculiar. They would rush up to the stranger, and then fling themselves on their backs and roll on the ground, slapping their thighs all the while and uttering words of welcome. These people had been a good deal harassed by Makololo depredations, and had only recently known what it was to be able to lie down at night and feel secure of sleep. When Livingstone, therefore, spoke to them of Him whose wish was for peace on earth and good will to men, he found them responsive. He tells us how they called out: "We are tired of flight; give us rest and sleep!" But, like those Lotos-eaters who sang—

"We have had enough of action, and of motion we, . . .
Give us long rest or dreamful ease,"

they were only thinking of that rest from toil or danger which is a gift withheld from mortals.

On regaining the banks of the Zambesi, Livingstone was again struck with the wonderful fertility of the soil and the abundance of life. Herds of buffaloes, elephants, antelopes, moved amid dense bushy country, and grazed on broad leaves or tender green twigs. The flocks of water-fowl were in themselves signs of the great river. It was at this time, and when much in need of food, that an elephant hunt took place, and as Livingstone has given a careful account of it, it will be well to record its main incidents here.

It appears that while the Doctor was clambering among some rocks, he noticed, at some distance, a cow-elephant with her calf taking a bath in a stagnant pool, and at the same moment he saw his own men cautiously approaching them in Indian file. The



"PLACED HERSELF BETWEEN HER OFFSPRING AND THE HUNTERS" (p. 40).

Doctor then climbed up higher, in order to see the method of hunting with greater ease. Heedless of their approaching danger, the old elephant was lazily

flapping her ears, and the calf was rolling in the mud—an elephantine mode of amusement. Suddenly there broke in upon this scene of family enjoyment the shouts and songs of the hunters. Some blew on tubes of reed, and some made their hands do duty for such. All, at any rate, began to yell in chorus a rough sort of hunting song:—

“O chief! chief! we have come to kill you!

O chief! chief! many more will die besides you!”

and so on, over and over again. The great ears of the elephants stood out straight from their heads as they listened in evident wonder at the strange sounds, and then both mother and child plunged out of the pool and took to solid ground. With a beautiful instinct the cow-elephant placed herself between her offspring and the hunters, who were now rushing forward in general disorder and excitement. Not content with this sign of her affection, she kept caressing the calf with her trunk. And now in the path lay a small stream. The time taken up by the elephants in descending the bank enabled the pursuers to catch up with them, and when the animals were in mid-stream the native hunters let fly a perfect shower of spears. In a moment, and from every part of the elephant, blood spurted out in jets, and then began to flow steadily down her corrugated flanks and thighs in an ever-increasing stream. Bewildered at this sudden attack she rushed blindly about, covering a great length of ground with each stride. Livingstone sent a man who was with him to bid the hunters spare the calf, but before this fellow could reach them it had become separated from its dam and was killed. This seemed to infuriate the mother, and she turned upon her enemies and charged them furiously. Not once, nor twice, but several times did she return to the charge; but luckily for the men, she was nearly blinded with rage and the spurting blood, and each time she charged she became visibly weaker. At last,

she seemed to know that her strength would hold out no longer; she turned and stood at bay for the space of a minute, then made a short charge right on to the spears of her merciless foes, staggered, and fell dead.

Livingstone had watched this from a distance, and he confessed that he felt sick at the sight. But he adds, with that liberality of mind which distinguished him, that on a former occasion when he was hunting an elephant himself, he felt all the excitement of the pursuit, and the flush of the final victory. Indeed, a few days afterwards he was himself killing an elephant, and no easy matter did he find it. While a troop of elephants was being chased by his men one fell into a hole, and by the time he had scrambled out the unlucky brute was riddled with more than eighty spears.

The men had thrown all their spears at him, and accordingly looked to Livingstone to finish him with the white man's weapon. Livingstone advanced to within twenty yards of the gigantic brute, and rested his gun on an ant hill, a few feet in height, in order to take sure aim. Yet, though he shot twelve heavy bullets into the creature, in all the vital parts, the game old elephant showed no signs of giving in. The Doctor had no more ammunition and the men had used all their spears; the night was drawing down with that rapidity which is peculiar to the tropics, and a council of war having been held it was decided to leave the creature alone till morning. But when morning broke he was nowhere to be seen! And although the most careful search was made for him within a radius of several miles, no sign of him was ever discovered. From this Livingstone drew the conclusion that it would never be safe for a hunter to stand in front of an unwounded elephant, and trust to his killing the creature with a couple of bullets; and the recent sad death of Mr. Frank James on the west coast of Africa, which occurred under these very circumstances, may be taken as a proof that Livingstone's

opinion, in spite of improved ammunition and rifle, is still worth attention.

Considering that African elephants were captured and taught to be useful to man, and even to perform juggling feats, by the old Romans, it is not a little surprising that there should be such a general idea that the African elephant is indomitable, and therefore only valuable for his ivory. It is true that, to the hunter and the trader, the value of this ivory has placed the advantage of so domesticating the elephant in a very secondary position; but at the same time the relative advantage has nothing to do with the fact that many people who ought to know better have declared that the African elephant is untamable.

The actual size of this noble beast varies with the latitude in which it is found, and is also dependent on other conditions. The average height of the males, at the withers, is perhaps about ten feet, and when the animal is full grown the circumference of his footmark may be taken as about half his height. Roughly speaking, the chief point which differentiates the African from the Indian elephant is the size of the ear—five feet long and four feet broad being a common measurement. While the size of the animal himself increases with the latitude as we depart from the equator, the tusks grow in bulk as we approach the region of that imaginary line. The largest tusks ever found come from the intensely tropical region. The largest known tusk weighs no fewer than 184 lbs., but the average weight might be put down at about one-third of that.

There is one other point worth mentioning about the elephants, for surprise has often been expressed that the large herds, which used to perambulate the most fertile districts of Central Africa, did not play greater havoc with the vegetation. Indeed, it was often difficult to trace the passage of a herd by only looking at the bushes and trees that lay in their path. The reason for this lies in a nutshell. The elephant

does not go in for quantity, but for quality. He will shake seeds and fruits down from a tree with the utmost gentleness, and pick them up one by one with no haste of greed or rapacity. He is most careful, even fastidious, in his choice of food; but he is wise for all that. Only that which contains a great amount of nourishment, or saccharine matter, is looked upon with favour. The bulbs and roots, the tender twigs and branches, which are fancied by him, are not gorged with an indiscriminating appetite; the hard exteriors and the woody fibres are not digested. A story was told in the days of the Jumbo mania that one sympathetic lady brought him, the day before he left the Zoological Gardens for America, a large basket of beautiful grapes. Having disposed of the grapes without any difficulty, Jumbo suddenly caught hold of the basket, and with an equal ease assimilated that receptacle! Whether this be true or not, it does not necessarily dispose of the well-established fact that the elephant, though the mightiest of beasts, is perhaps the daintiest in the matter of diet.

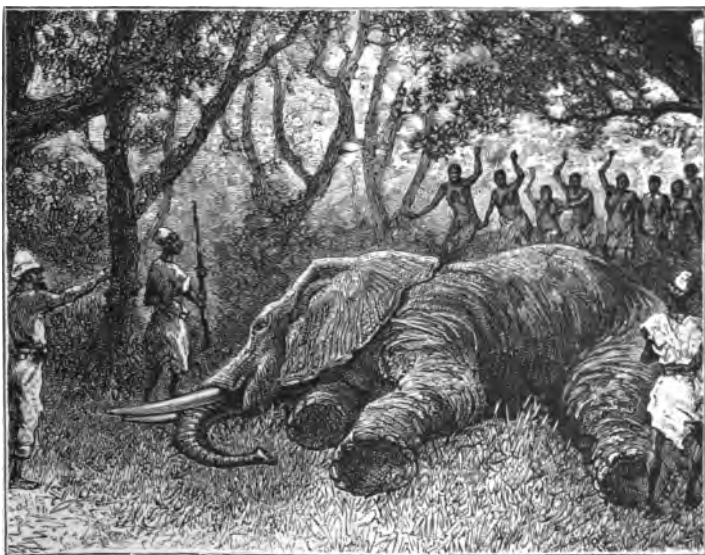
On arriving in the district over which a chief named Mpende held sway, Livingstone found for the first time that a difference between white men was recognised. He was mistaken for a Portuguese, and great hostility was evinced. Acting under the instructions of the court chaplain, or enchanter, Mpende kept his visitor at a distance, and made preparations for an attack. Livingstone could go neither backward nor forward—the one step would be taken for fear and the other for defiance; both would have been fatal. Trusting to delay, however, he roasted one of the oxen and made his men feast. As their stomachs were filled their spirits rose, and the Makololo—faithful fellows—kept assuring their leader that though he had seen what they could do with elephants, he had not seen what they could do with men. And, indeed, it is quite possible that as the Makololo were the premier race on the whole of the Zambesi for prowess

of war, the result of an open contest would not have been so unfavourable for Livingstone; as it was, the delay brought a turn in events, and Mpende, having heard good reports of Livingstone from other natives, and recognising the force of the argument that said Livingstone couldn't be a bad man, or the other chiefs through whose countries he had passed would not have allowed him to come thus far, bade the traveller welcome to his country.

I have said that Livingstone had at first been mistaken for a Portuguese. When, however, they saw the whiteness of his skin as compared with that of the Portuguese, they recognised their mistake. And then they exclaimed: "Ah! you must be one of that tribe that has heart for the black men." This was indeed a wonderful testimony to the name and fame of the nation which was pledged to the abolition of slavery, and was at that time taking very active steps to prevent the slave-trade of Africa. One man said that Livingstone belonged to "the friendly white tribe"; thus making it clear that the only other white tribe of which they knew was not so regarded. And, after a little while, yet another was found to bear testimony—one who had travelled far from the south, and who had evidently met Englishmen before. "The English," he said, "*are men*"; emphasising the last word with an eloquent gesture. And thus it was that, by the exercise of patience and forbearance, the Doctor came safely out of the danger in which he had for a short while been placed; Mpende from being a foe had become a friend, and his generous behaviour to the Doctor was emulated by his people in the hospitality they showed to the Makololo.

After leaving Mpende's, Livingstone entered a region where, curious to relate, there existed a strict code of game-laws. For instance, if a buffalo or an elephant were wounded on the land of one chief, and did not die until it had been chased into the territory of another, the under half of the beast belonged to him

on whose land it lay. And, in order that a fair half might be secured, it was not allowable to cut up the dead animal until notice had been given to the "lord of the manor," who then sent an agent to look after his rights. The penalty for ignoring this is the forfeiture of the tusks and flesh. Livingstone, who made a point of observing all native customs that were not barbarous, frequently suffered delay at this



THE DEAD ELEPHANT.

part of his journey through his loyal observance of the practice. When much in need of food, his men were fortunate enough to kill an elephant; but they had to wait two days before the owner of the land on which the elephant was lying could be heard from. By that time a large part of the flesh was unfit for food, but what was eatable became theirs by right.

Livingstone had met with the first outposts of the white man shortly after passing the mouth of the

Loangwa river. But it had long been deserted, and only a few ruins remained to tell that Zumbo had formerly been inhabited by the white man. In stumbling over the ruins the Doctor found some vestiges of a church, and among the débris he discovered a broken bell bearing the symbol I.H.S. and a Cross. On passing the Kebrabasa Falls, however, and nearing Tete, he found himself within touch of the Portuguese. Simultaneously he met with natives who were accustomed to sell their children into slavery. In those early years of the development of Central Africa such a practice was unknown in the far interior, and even those who had yielded to the temptation of selling for gain to the neighbouring Portuguese, seemed to think that they had been unjustly treated—that the traders had taken advantage of their consuming desire to possess the gay cottons, and tinsel, and beads, which were the chief forms of currency. Any one who has read a book of African travel of more recent times will know how widespread the traffic in slaves has become, and how many districts which were densely populated and carefully cultivated in Livingstone's time are now utterly desolate. The strong and healthy have been given away into slavery, and the weak and old have been either mercilessly slaughtered, or cast out of the caravan to die by the wayside.

Consequently, the once populous villages, and the fields of corn which waved around them, are no more ; there is none to dwell in the villages, none to cultivate the corn, none to need it. It would be no exaggeration to say that the whole of Central Africa has been gathered into the arena in which the slave-trader has played his devilish part. The invasion of the Arab has been contemporaneous with the explorations of the Europeans, and it is quite a legitimate question to ask whether the opening up of so many regions by the latter has not contributed in a considerable degree to the widespread devastations of the former.

But in Livingstone's early days, and when he accomplished this famous journey of his across Africa, the only districts in which he met with the slave-trade were these over which the Portuguese held sway. He had met with it as he journeyed through Angola, and now again he found it as he entered the sphere of Portuguese influence in the basin of the Lower Zambesi.

At last, on the 3rd of March, 1856, he arrived at Tete, and was there most hospitably received by the Portuguese governor. Indeed, the personal relations of the Portuguese with Livingstone were nearly always most cordial; it was their public policy, and that chiefly in the matter of the slave-trade, which he felt it his duty to oppose so strenuously. For the first time for eighteen months he slept in a bed, and partook of meals which could be called civilised. He felt that he had practically come to his journey's end, and was within easy reach of home. But just at this juncture, the malarious character of the Zambesi climate once more showed itself by prostrating him with a severe attack of fever. It was not till the 22nd of April that he was able to proceed on his way to the coast. During his illness, and indeed throughout the whole of his stay at Tete, Livingstone received the greatest kindness from all the Portuguese. Over and over again in his book, he recounts their many acts of kindness, and he does this with a purpose. "I have noted," he says, "each little act of civility received, because somehow or other we have come to hold the Portuguese character in rather a low estimation. This may have arisen partly from the pertinacity with which some of them have pursued the slave-trade, and partly from the contrast which they now offer to their illustrious ancestors—the foremost navigators of the world. . . . From every one of these gentlemen I am happy to acknowledge that I received most disinterested kindness, and I ought to speak well for ever of Portuguese hospitality."

Livingstone left most of his men at Tete, and the governor, Major Sicard, most generously allotted them land on which they might raise food, and gave them permission to go elephant-hunting with his own slaves. Thus they were not only able to live, but even to make money, while they were waiting for the Doctor to return and escort them home. For he had promised to take them back to the country from which he had brought them, just as he had promised their brethren who had followed him to Loanda. And it may be well to add here that, four years later, on returning from England, and after exploring the Shiré River and discovering Lake Shirwa, and that inland sea the Lake Nyassa, he fulfilled his promise, and led his faithful Makololo back again to Linyanti.

Embarking in a large canoe provided by the governor of Tete, and accompanied by a Portuguese officer, who had strict injunctions to look after the Doctor's comfort in every way, Livingstone descended the Zambesi without any further inconveniences. As a traveller through districts untrodden by the white man's foot his work had come to an end; but it was not until the 20th of May that he reached Quilimane, and so accomplished his journey across Africa.

In the light of more recent exploration, and of the British protectorate which now envelops the central course of the Zambesi, and much of the country through which Livingstone passed on this journey, it cannot but be interesting to recall his own views on the further development of this great region. One thing he made quite plain; he regarded his opening of the Zambesi country as a matter for congratulation because it made the gradual elevation of the natives possible. He was not one to impose an European culture upon the stark native—the heir of many ages in the rearward march of time—but he was convinced that a stop could be put to the internecine wars, which were preventing many of the tribes from living at peace, and carrying on that pastoral labour to which

their natures inclined. He had found no difficulty on the part of the natives in understanding the existence of a supreme and invisible Deity—they were already familiar with such a conception in their own crude faiths. And when he spoke the watchword of Christianity: "Peace on earth and good will toward men," he found the natives, tired of fighting and raiding, ready not only to recognise the wisdom of the saying, but to carry it out in the practice of their lives. "I view," said Livingstone, "the end of the geographical feat as the beginning of the missionary enterprise." This, then, was his first desire for the dusky millions of the newly discovered country.

His next wish was to improve their material welfare. He considered that the country was adapted for cotton, and that if a large quantity of superior seed were introduced, the people might easily be stimulated to produce that valuable article of raw commerce. By the production in considerable bulk of an article of merchandise which would be valued in England, Livingstone shrewdly apprehended that the importance of the natives, and the desirability of protecting them, would not be overlooked by this nation. And by the mere process of constant interchange of commodities, the natives themselves would be raised in the mental and moral scale.

There was another crop that could be largely produced, and that was sugar. When Livingstone visited the Mauritius on his homeward passage, he was greatly struck by the enormous crops which that little island, "a mere speck in the ocean," turned out year by year. Its soil was not rich, its land was dear to buy or rent, and its labour was imported from India. In the Zambesi basin, on the other hand, he found a vast and well watered country, whose soil was extremely fertile, whose owners were ready to sell large tracts for a mere trifle, and where, too, any quantity of free labour was to be had. Conditions have changed since Livingstone's time, but it can hardly be said that they

have been reversed. His plans are still sufficiently sound to make it worth the while of the British South African company to try the experiment. Native labour is the secret of the success, and this must be organised and most judiciously controlled; native independence must be aimed at, or the employers will be regarded as masters; and the vegetable resources of the entire country must be examined by the scientific, if sources of wealth are not to be passed by. When Livingstone was at Tete, the chief "weed" of the district was the indigo plant! It grew so prolifically that it even invaded the streets, and it was looked upon as such a nuisance that it was annually burned off! This was the Portuguese attitude at that time to the natural resources of the country they had inherited from their colonising ancestors. It is an attitude which is impossible nowadays, when the whole world is being ransacked for mineral or vegetable substances that will bring a price in the market. What Livingstone said of Angola may be also true of the basin of that great river with which his name is, and ever will be, so closely identified.

"If England had possessed that strip of land, the inborn energy of English colonists would have developed its resources, and the exports would not have been £100,000 as now, but £1,000,000 at least."

It will not be without point if I indicate, as briefly as possible, the indirect, as well as the direct, outcome of Livingstone's famous journey down the Zambesi. Its influence has been exerted in two directions—directions which though diverse at first, eventually meet. In the first direction we find the building-up of a series of missionary centres throughout the length and breadth of the land, and the example, in the process of that construction, of many who have led noble lives, and have, like Livingstone, nobly laid them down. And this has necessitated the expansion of our knowledge of the interior, of its people, resources, means of intercommunication and avenues of approach.

In the second direction, that of the resistance and gradual suppression of the slave-trade, together with the introduction of legitimate commerce, we find his influence unwaning. In his name men still conjure and do mighty acts. With his prayer upon their lips, or with his statesmanlike plans, matured by years of much thought and ripened in experience, in their minds, men have done a great deal to redress the wrongs of Africa—his own dear Africa. Let me sum up briefly the progress thus achieved.

In the first place, there is the missionary energy expended; an energy, be it noted, which is not confined to the mere preaching of the Gospel, whose ethics may be difficult enough to minds steeped in the stupor of barbarism, but an energy which is conspicuous in its showing forth, by very deed and in a really catholic manner, the solid virtues and advantages of a Christian life. Sobriety, truth, friendship, an attitude of goodwill to all, peace, industry, and a purer social life—these are the desirable truths which the bands of missionaries (men and women) have, in the great majority of cases, been enforcing in their lives. The Scotch missionaries on Lake Nyassa, the servants of the Universities' Mission between that inland sea and the Indian Ocean, the pioneers of civilisation at Blantyre, are all heirs and co-heirs of Livingstone's legacy. The shores of the Tanganyika have been occupied by the missionaries of the London Society, and to the northward the workers of the Church Missionary Society have sown good seed in abundance around the Victoria Nyanza. For a thousand miles along the mighty Congo itself—the headwaters of which Livingstone traversed so much in his later years, and the mystery of which he had so longed to solve—little bands of devoted men and women may be met with. From east to west, at every vantage point, the missionaries are making their position secure, and studying to extend their sphere of influence. It is, perhaps, to be regretted that one of Livingstone's

ideals has not been more successfully carried out—that of training natives to be teachers, and of founding, on a large scale, a native ministry. In this way alone can the task of combating the advance of that Mahometanism, which makes of men moral paralytics, be taken up on all sides, and rendered intelligible to the natives. But the difficulties in the way are great, and for what has been achieved, for much that is really solid gain, one must have gratitude. Livingstone looked far ahead, and his words were often words of prophecy to future generations. All that he desired will come to pass, though not yet. And it may be better so. The evolution of civilisation is slow, but perhaps for that very reason it may be the surer.

Then there is the impetus given to exploration by his own far journeys and great discoveries. Here we have another direct outcome of the renown of his march across Africa. It is impossible to follow, in anything like detail, the bold explorers who have forged their way to the heart, and through the heart, of the Dark Continent in the last generation. First and foremost, of course, there is Stanley,—

“Strong in will,
To strive, to seek, to find, and not to yield.”

He began with the search for Livingstone, he has recently capped his long career with the quest for Emin. Between these two journeys, both ending in a success which subsequent circumstances unhappily rendered in both cases but a partial success, lies a whole world of wonderful adventure. The story of his journey to Uganda, his navigation of the Nyanza, his *détour* of the Tanganyika, his triumphant descent of the Congo, his founding the Free State in the basin of that river—a state whose future development none can predicate—are not these the brightest gems in the crown of our modern Paladin? His bold marches, his desperate encounters, his stubborn

defence; his impatience of delay, imperious will, dauntless spirit, intolerance of restraint, and wonderful success have made him an unique personage among the explorers of Africa. For Stanley is not only quite the most successful of this gallant band, but in many respects he is the most interesting. His conduct has many points in common with one of those tropical rivers he has so often described. At times his actions spring from motives that are a mystery: they are pent up in some narrow channel, diverted by an opposing bar, haply of sand or mud, and the harsh rocks, protruding, make of the current an agitated cataract, bubbling, leaping, swirling, foaming. At other times, too, like the mightiest river linked with his name, his career is swift, clear, strong, unswerving, resistless. Ahead is the open ocean: his course thither is direct, and there is no delay. The current is swift, it may be dangerous; but man knows whither it flows, and he can follow it from the darkest depths of the forest to the shores of the ocean-highway of the world.

And after Stanley—Cameron. He crossed the continent, like Stanley, from east to west; but missing the path to fame—the way of the Congo—he passed by well-beaten slave-paths to the west coast. Still he gathered much on the route, and, what is more, has ever given his knowledge and experience to Livingstone's cause. After Cameron, I would place Arnot—Frederick Stanley Arnot. Stanley has called Mackay, the noble missionary of Uganda who has now joined Livingstone in his rest, "the modern Livingstone." It is a misnomer. Livingstone, after those early days in Bechuanaland, was never stationary: he was ever wandering. Mackay, on the contrary, remained firmly fixed in Uganda until, a year or so before his death, he was driven thence to the nearest spot compatible with safety—the southern shores of the Nyanza. From there he could look across the lake and know that on the further side lay his beloved Uganda; for the moment passing through a fiery trial. But Arnot

has the characteristics of Livingstone, and will, in all probability, leave behind a name as sweet. He is a wanderer, poor and without weapons of offence. He has walked across Africa practically alone, and with no weapon of defence but a walking-stick. He does not depend—as Livingstone wished not to depend, and eventually did not—on any society for direction in far-off England, as to what he shall do or not do in unknown Africa. Independence is the method he prefers in working out the mission which he has received from Livingstone, and Katanga is the province which he has occupied with not a little success. Of Arnot we shall hear more, for he has discretion joined to the courage of a lion, and of such partners one naturally expects great things.

Then there is Thomson, an explorer whose actions are inspired in no small degree by the good example of the great apostle of modern Africa. Of him it may be truly said that he never voluntarily made an enemy of a native. In his explorations of the Tanganyika, and, still more, in his march through the land of the savage Masai, he has shown a readiness of resource, and a firm restraint, which have done much to help the missionary in his onerous task. In Thomson's hands neither the fame nor the honesty of Englishmen has suffered reproach. With Thomson must be linked H. H. Johnston, whose methods are like his. Of the two, the more brilliant and, in a worldly sense, the more successful is Johnston; but in dealing with the natives his demeanour and that of Thomson are identical. Kindliness and sympathy are the key-notes to their conduct and the direct avenues to their success. Then there are men like O'Neill, Last, Hore, Selous, Maples, Stewart, Grenfell, Comber and many more who have fought the good fight with the weapons of the great pioneer, who have won to themselves respect like unto his, and who have, as often as not, laid down their lives, and like him "slept in Africa."

I have now reached the point where we naturally arrive ; at the consideration of the efforts to suppress the slave-trade, and introduce, in its stead, legitimate commerce upon a large scale. In my "David Livingstone" I find these words: "A year or so ago the region around the south end of Tanganyika teemed with life and simple industry. To-day the march of the Arab can be followed by the charred embers which mark the villages, and the skeletons by the roadside which are all that is left of the people. Wissmann, when descending the Kasai and travelling among the Basonge, passed through enormous villages—or rather towns—six and seven miles in length, whose dense population cultivated the land many miles around. A year or so after he came to the same places ; the fields were sprouting jungles, the houses were heaps of ashes and tinder. When Livingstone and Stanley travelled through Manyuema nothing struck them more than the hordes of inhabitants. To-day Manyuema is a wilderness. From Nyangwe to Stanley Falls, Tippu Tip and men of his calibre have devastated vast tracts of country, and the whole region lying west and south of Lakes Moero and Bangweolo is depopulated. From the Kasai on the west, and the hilly country of the Masai on the east, from the head-waters of the Koango to the lower waters of the Rovuma, and from the Manganja, 15° south of the equator, to the Soudanese of Kordofan, 15° north of it, Africa is harassed by these fiends in human form."

Clearly, then, since this state of things still obtains, the last prayer of Livingstone has not yet been fulfilled. But we are going in the right direction. England has resumed possession of Zanzibar and Pemba, and abolished slavery in those islands ; as far as possible the import of slaves is being checked in Egypt, and the Red Sea traffic is closely watched by British men-of-war. A crusade against the slave-traders, a war in which armed forces should contend on the soil of the unfortunate African, would be a

doubtful blessing, and for the time being an indubitable curse. By the drawing together of the scattered links which go to make the mighty chain of civilisation which has been bound about the heart of Africa, much has been done ; but there can be little doubt that the creation of vast states in the interior, controlled and officered by Europeans, and devoted to the development of the resources of the continent, will prove the mightiest weapon to suppress the slave-traders, and at the same time substitute a genuine commerce.

For a number of years the Congo Free State, founded by Stanley with the assistance of the King of the Belgians, has been in the field. Its success has been too slow for many who thought Africa and the African could become in a day, in a year, what it had taken Europe and the European thousands of years to reach. But, nevertheless, the most distinct advance has been made. The great river is an international highway ; its main tributaries are well-travelled routes. Roads have been made, and thousands of natives taught to work and taught the value of work in the making of them. The slavers have been kept from descending the river Congo, whose banks teem with people. The raw material which is so abundant in the basin of the Upper Congo is being brought down to the ports at the mouth in ever-increasing quantity. The people, led by their chiefs, have learnt to live in peace with one another, and some of the tribes which proved themselves the most savage on the river can now be seen doing police patrol along its banks !

What the Free State has done in the basin of the Congo the African Lakes Company has achieved in Nyassaland. Their success has been great, and is richly deserved. In quite early days its pioneers passed up the Shiré, and planted its flag on a spot which was then named Livingstonia. The slave-routes which cross the Nyassa, and sweep round both the northern and southern shores of the lake, have

been a terrible obstacle, but the little Scotch company has not only held its own but extended its borders. "No wonder," said Captain Lugard, when addressing the British Association in 1889—"no wonder that those interested in the suppression of the slave-trade turned their attention to Nyassaland. . . . Here, for over twenty years, the Universities' Mission had worked, and spent many thousands of pounds and many noble lives. Here, for the last fourteen years, the Scotch Churches had been working with untiring zeal, founding some dozen stations; and closely following on these a trading company, in its origin largely philanthropic, and founded at first as a lay Mission Society, had established trading centres along all the area occupied by the missions; while even private philanthropy had expended large sums in the construction of the Stevenson Road, between Tanganyika and Nyassa."

But the most direct and satisfactory outcome of Livingstone's march across Africa is the recent envelopment of the Zambesi by the British Protectorate, and the opening of the river to international commerce. It is the seal of his labours. It not only places under British control the middle course of the river he was practically the first to explore, but it includes the vast region which lies between the Zambesi, the Tanganyika, and the Nyassa, and where he afterwards journeyed, up and down, for so many years; where, indeed, he eventually died. Henceforward the British flag will wave over that vast stretch of country; henceforward British merchandise will be borne, by right, down the broad bosom of the Zambesi. The slave-trade will no longer be permitted; intertribal warfare will be forbidden; commerce will be initiated by the white man and carried on by the black; peace and industry will take the place of war and the slave-trade.

The precise development of the civilisation of Central Africa we cannot of course predict; but we know that it is proceeding on the lines of industry,

humanity, and the moral enlightenment of the native races. This can have but one issue—the full development of the natural resources of the country, and the raising of the native character to an extent which, if it could be stated now, would be at once declared impossible by the very men to whom the greatest credence would be given—the men who claim to know the native and his capabilities. And this, let us remember, though slow to come, is what we shall have gained by Livingstone's famous march across Africa.

BURTON'S PILGRIMAGE TO MEDINA
AND MECCA.



SIR RICHARD BURTON, K.C.M.G.

From a Photo by Elliott & Fry.

BURTON'S PILGRIMAGE TO MEDINA AND MECCA.

1853.

THE continent of Asia contains the Holy Cities of the five great religions of the world. On Asiatic soil, and under the peculiar conditions of Asiatic life, Buddhism, Brahminism, the Jewish and Christian faiths, and finally, Mahometanism were first originated, fostered and spread. Buddhists now form nearly one-third of the human race; of Brahmins there are some two hundred millions, and a like number the Mahometans may be said to attain. Of the three, however, the Mahometans have been strongest and most widely dispersed; their empire has been greater even than that of Rome; it was washed on the west by the wide waters of the Atlantic, and on the east by the warm seas over which the spice-laden breezes of Malaysia swept. Its oriental influence overran Europe, in spite of northerly winds and snow-clad hills; across the torrid plains of India it swept like the flame of a prairie fire; and throughout Africa, from the shore of the Mediterranean to the malarious valley of the Zambesi, it was borne by the Arab as he wandered far and wide in his quest of gain.

Yet this mighty influence came from a land which is more than usually sterile and desert; a land whose climate is, at seasons, almost insupportable, whose coasts, with their grim, bare hills, are more than inhospitable; a land which knows neither river nor lake,

whose springs gush out only to be quenched by the burning sand. As if this country were intended to be for ever isolated from the rest of the world, its coasts are fringed with dangerous reefs and sunken archipelagoes; no bay or gulf opens sheltering arms; and on the north, where it adjoins Syria and establishes contact with the continent of Asia, the wide wastes of its own Nefud Desert mingle and are lost in those of the great Syrian Desert, and form an almost impassable frontier. Yet, so strong an exception is Arabia to the rule that man is the creature of his environment and dependent on local conditions, that in former times the empire of the Arab extended to the uttermost parts of the then known world, and to this day his religion gives both law and custom to nearly a seventh of the human race. It is true that no foreign foe has invaded a land which nature has placed on the defensive; it is true that its barren soils and riverless valleys have held out no attraction to man in his many migrations from country to country; but we might equally expect that the Arab himself would have remained an isolated and almost unknown individual: a dweller in rare and widely scattered oases, possessing little beyond his camel and his camel's hair blanket; looking upon the gaunt iron-red hills and the wastes of burning sand with eyes of satisfied affection, and dying at the last, perchance, of hunger or thirst. But his history is very different, and it may be said to have begun when Mahomet came forth from Mecca, and preached by precept and example the great religion of the Crescent; when, with the sword in his right hand, he revealed the ecstasies of the mountain; when, mixing his diviner thoughts with a large proportion of the alloy of human nature, he laid on the soul of man the flattering unction of a religion based on self-righteousness.

Arabia is a Holy Land; that western strip which runs from near the peninsula of Sinai southward to a spot opposite to Suakim, and which is known as El

Hejaz, contains its most sacred soil ; and the cities of Medina and Mecca are its sanctuaries. Medina preserves the tomb of the prophet, and is only one degree less revered than Mecca. Mecca, which was the birthplace of Mahomet, and which contains the Black Stone, to touch which is to obtain remission of sins and open the gates of Paradise, is the "Holy of Holies" of Islam. It is not only the capital of Arabia, it is the metropolis, the mother-city of the Mahometan world. It is the goal of the millions of pilgrims who year by year come thousands of miles to enter its holy gates ; no pilgrim has completed his "haj" until his eyes have beheld the Kaabah of Mecca, neither is he entitled to the respect due to a "haji." Mecca is the one spot on earth, according to the Mahometan, where he can reach out his hand and touch heaven ; it is the ultimate goal of his highest hopes ; to have entered Mecca is glory, to die in Mecca is salvation. Towards Mecca two hundred millions of human beings, of nations and tongues innumerable, invariably turn when at the hour of prayer they offer up their supplications to Allah, the one God. For as the Mussulman is ever exclaiming, "There is no God but God, and Mahomet is his Prophet."

Islam was created in bloodshed, and its borders have ever been extended by the sword. Its missionaries preach the gospel of their Koran at the point of spear and with the blade of scimitar. Hatred of the "kafir"—those who reject the supremacy of the prophet, be they of whatsoever nation and tongue—gave birth to its natural offspring of bigotry, and from bigotry sprang fanaticism. Fanaticism inspired tyranny and sanctified cruelty, and the peculiar tenets of Mahometanism fostered the worst passions of man ; oriental practices, incorporated in the teaching of the prophet, obscured the higher social virtues, and, while permitting licence to life, debased the ideal of an existence after death. Woman became a chattel—now a slave, and now a plaything ; and man refused to accept

responsibility for either her bodily or spiritual welfare. To the highest courage in the presence of the foe, the Mahometan linked the lowest courage in matters of morality. Just as the muttered word "kafir" will render the Mussulman a very lion in his fury, so will the word "kismet" make him as docile as a shorn lamb. At the whisper of the one, he will lay hands on sword or pistol and fling away his life, if only he may slay an unbeliever; gently repeating the other, he will accept the simplest obstacle as insuperable, and yield himself up to defeat and loss, and even death, when the slightest action on his part would protect him from all. But the objects of supremest contempt and hatred to the Mussulman are the "pariah dog of a Christian" and "the heretic dog of a Jew." They are to him anathema maranatha. They are the accursed of the earth. To them can he yield no obedience unless he is forced; nor grant any justice should he have the power. For a Christian to meet a Mahometan in the East was—but few years ago—to meet with undisguised insult; but for a Christian to enter a mosque, or the precincts of a mosque, or to touch any vessel sacred to the service of Allah, was certain death. What, then, would be the fate of him who was mad enough to enter the Holy Land of Arabia, to tread the sacred soil of El Hejaz, to pass within the gates of those sanctuaries of Islam—Medina and Mecca—and to rest his unbelieving eyes on the tomb of the prophet, or on that rock of ages, that corner stone of paradise, the Black Stone of the Kaabah? The refinements of torture that would be reserved for him we may hardly guess, and this it is that places the pilgrimage of the late Sir Richard Burton on so high a plane of courage. Great as was his command of Arabic, and his knowledge of the minutest details of Arab customs; great as was his patient persistence in the very smallest duties which, in his rôle of a pilgrim, he had voluntarily accepted; great as was the success which attended his "haj," and

the knowledge he subsequently imparted to the world, they are small matters beside the calm unflinching courage with which he lived his daily life in the caravan or the caravanserai. When toiling through the wild wadis, beset by robbers, or when chaffering with the traders in the bazaars of the cities; when looking at the prophet's tomb or gazing through the prophet's window—for each and every action he was calmly holding his life in his open hand, and exposing himself to the momentary risk of detection. His journey to Mecca had rich results for literature and religious lore; rich results for geographical students, for those of oriental learning; but it may well be said that the moral lesson of Richard Burton's steadfastness was the best and highest of all the results of his memorable journey.

And a few words here on Richard Burton's life, antecedent to his pilgrimage, may serve to show what manner of man he was, and how he had prepared himself for the work. The son of a military officer who lived on the continent, and wandered from country to country, he himself learnt in youth what it was to find no rest for his feet. Destined for ministry in the Church of England, he proceeded in due time to Oxford. He showed himself, however, fonder of fencing than of theology, and, while neglecting Greek and Latin (though no mean scholar), he pursued with ardour the study of Arabic. In the escapades of University life—and in the forties these escapades were of no milk-and-water character—he proved himself a leader, and finally became so restive at restraint that he deliberately sought rustication. Then heredity helped him to make his choice—the choice of the military profession. Studying Hindustani, and rapidly becoming proficient in it, he soon obtained an appointment in the Indian Army, and in October 1842 arrived at Bombay. Almost at once he became regimental interpreter, and a subsequent residence in Scinde produced his first noticeable book: "Scinde; or, the Unhappy

Valley." A six months' furlough resulted in "Goa and the Blue Mountains"; and, it should be noted, about this time he mastered the Gujarati and Marathi languages. But command of vocabulary and facility of



MAP OF BURTON'S ROUTE.

speech were not the sole objects of Burton's studies: the faiths, the fables, the history of the people attracted his deepest interest; he observed and noted down all their practices and customs, and learnt their signifi-

cance and origin. As has been truly said, he made himself "familiar with all the nooks and corners of Eastern lore." He was ever a student with a strong affinity for literature, and taste for linguistic elegance—he delighted in antiquities and survivals of the past—yet he was devoted to arms and military matters, and fearless in the field. Unconventional of course he was; not apt to brook official circuitousness nor at all unwilling to break the official red tape asunder; but as a leader of men, excellent; as a companion, deeply interesting; as a thinker, so thorough, direct, intense and fearless, as to be incapable of letting himself into hypocritical assurance, or hiding himself in "coward's castle." To diplomatic ministers of state and heads of departments, at a later stage of his life, and at this stage to his commanding officer, he was an erratic and independent individual on whom no reliance could be placed; and this view of Burton was maintained throughout his career. Otherwise, he would not have returned home in 1849, having just added Persian and other Eastern languages to his linguistic attainments, yet suffering from a disappointment of promotion in his official career. It was this, however, that led him to contemplate the pilgrimage to Mecca, which dangerous venture, by his own admirable courage and wonderful attainments, aided by a substantial grant from the Royal Geographical Society, he was enabled to accomplish with success.

Burton's idea had been to enter Arabia from Muscat, and slowly cross the wide deserts which appeared then and which appear now upon our maps as such great blanks. He failed, however, to obtain the amount of leave necessary for this object, and so it came to pass that we find him entering the most jealously guarded region of Arabia, the "Holy of Holies" of Islam, when fresh from life in Europe, and far more likely to betray himself than he would have been after a long journey across the peninsula.

On April 3rd, 1853, Burton left London, disguised

as a Persian mirza, and sailed from Southampton on board the P. & O. steamer *Bengal*. From the first he adopted the disguise—and how minutely he maintained it may be gathered from his humorous description of the devout Oriental's method of drinking a glass of water, a method which he was now to employ. "In the first place," he writes, "he clutches his tumbler as though it were the throat of a foe; secondly, he ejaculates, 'In the name of Allah the compassionate, the merciful!' before wetting his lips; thirdly, he imbibes the contents, swallowing them, not drinking, and ending with a satisfied grunt; fourthly, before setting down the cup, he sighs forth, 'Praise be to Allah!'—of which you will understand the full meaning in the desert; and, fifthly, he replies, 'May Allah make it pleasant to thee!' in answer to his friend's polite 'Pleasantly and health!' Also he is careful to avoid irreligious action of drinking the pure element in a standing position, mindful, however, of the three recognised exceptions,—the fluid of the holy well, Zem-zem; water distributed in charity, and that which remains after Wuzu, the lesser ablution."

On arriving at Alexandria, Burton went to the house of an English friend, where, however, he rigorously maintained his rôle as an Oriental. The mission he had undertaken was too perilous to admit of the least indiscretion, and consequently he lodged in an out-house, where privacy might be obtained when needed. Meanwhile he employed a sheikh—who may be anything, from a cut-throat chief to the mildest mannered "teacher of languages" possible—to read the Koran with him, and to study and discuss the ritual of the Moslems. Much of this, it should be remembered, is not committed to writing, and anyone who wishes to be complete master of the multitudinous ceremonies is obliged to avail himself of the priestly experience of the sheikhs. Burton was really recapitulating his former experiences, and drilling himself for the work which lay before him. When not engaged in study

he was roaming about the bazaars, and whiling the hours away in that marvellous trial of patience which in the East "shopping" becomes. From time to time he would pay visits to some sacred spot, such as the tomb of the prophet Daniel, or those of other Walis—holy men held in universal respect.

Burton gave out that he was a doctor, and in the East—and, it may be added, in all parts of the world—this character insures good treatment and not a little respect. In this case the doctor was not all a sham. He had always taken practical interest in medicine, and had often doctored himself and others with marked success. In hot climates, too, diseases, though more severe, are less complicated. Indeed—and this helps to make medical treatment a more simple matter—there is a certain affinity to ague in nearly all diseases peculiar to tropical countries, or, in other words, a certain "periodicity"; a regular recurrence of fever and chill, of pain and freedom from pain. As a consequence, anyone who has resided for any period in such countries becomes familiar, not only with the symptoms of their well-marked diseases, but is also able to trace the progress of the disease, and detect signs of approaching crisis. And Burton, who had taken more than an ordinary interest in these matters, was therefore well able to pass as a doctor; and, it might be added, by his knowledge of oriental charms and divinations to commend himself to the favour of the natives.

It was at this time, too, that in order to secure better treatment from the fanatic Moslems of El Hejaz, he changed the Persian "mirza" (*i.e.*, Mr.) to the Arab "shaykh" or "sheikh." Abdullah he was before, and Abdullah he remained; and since the meaning of the name is "servant of God" he could hardly have gained by a change. About the same time, too, he was initiated into the Moslem order of Kadiriyyah, under the name of Bismillah-Shah, which, as Burton afterwards explained, meant "King-in-the-name-of-Allah," and was, therefore, a sort of oriental "Praise

God Barebones." As he was able to proceed to the degree of "murshid" in this order, we can guess how proficient he was in the rites and ceremonies, as well as the dogmas of the Moslem. And all this while, be it noted, throughout long days of almost endless conversations with keen and travelled Mahometans, he was able to sustain all the devices by which his disguise was alone secure, and hoodwink men who are as apt to suspect as they are themselves jealous of suspicion. Thus it was that Burton changed his birthplace from Persia to India, his style from mirza to sheikh, and assumed the character of a dervish—of the better sort.

All was now ready for the pilgrimage except the passport. Now, as passports are generally regarded as troublesome affairs in the most civilised countries and under the most enlightened government, it is easy to imagine what they become under such misrule as that of Turkey. Burton experienced so remarkable a series of checks and counter-checks in his efforts to obtain his passport that a brief account of them may be given here. From the English consul at Alexandria he obtained the form declaring him to be an Indo-British subject, by name Abdullah, and by profession a doctor; but the counter-signature of a Turkish magistrate was required before it became a passport. At least, so said the consul. The next day, therefore, Burton went to this magistrate, who sent him on to the governor. After scorching himself for three hours on the steps leading to the governor's house, he was informed that "the Foreign Office" was the right place to go to. Next day, therefore, Burton set out to seek for this office, and was directed to a large palace wherein a number of public offices were situated. He spent the morning in endeavouring to get one listener to his request—and that one he bribed with tobacco and a "tip." He was then conducted up a gorgeous staircase to the presence of an official, who merely replied to Burton's petitions—set

out with a proper number of salaams and blessings—"below." Below, accordingly, our friend Abdullah retired, and after some time his guide discovered that a room in one part of the palace bore the magniloquent title of "Foreign Office"! The door, however, was fast shut, and after the pilgrim, in company with numerous individuals, had sat for several hours outside it, they were informed by an official that the custodian or director of the "Foreign Office" had taken a holiday and would not return till the morrow. On the morrow, therefore, "Dr. Abdullah" came again in quest of the *visé*, and on this occasion he was—at last—successful. Such was the experience of Burton in the guise of a dervish in the days of Turkish misrule; and such, we may be sure, is still the experience of many a luckless native, who endeavours to carry any business through with the aid of the officials of so ponderous a machine as the Turkish Government.

And now we must note the outfit which Abdullah required. Among the articles was a rag, in which were wrapped a wooden comb, a very small piece of soap, and a short piece of soft wood, chewed at one end, for the purpose of cleaning the teeth. Next might be mentioned two or three changes of raiment; a water-bag of goat skin formed the staple of the commissariat; and a Persian rug took the place of chair, table, couch, and oratory. A blanket for a cold night, and a sheet for a hot one, completed the domestic furniture of the pilgrim. For roof he had the protection of a yellow cotton umbrella, and for weapons of offence and defence, a dagger and—for it might well be used on occasion—a large and heavy rosary. A leather belt around the waist, and next to the skin, contained his gold and valuable papers, and a small cotton bag his small change. Finally a small but strong medicine box, gorgeously painted in oriental style, completed Burton's outfit when he left Alexandria. On reaching Cairo, however, he added stores

of tea, coffee, rice, sugar, dates, biscuits, oil, vinegar, tobacco, lanterns, cooking utensils, three water-skins, and a small tent. The stores were stowed away in a box and hamper; the latter being made of palm-sticks. Here, also, he obtained the pilgrim garb and the shroud which the true Moslem requires on his way through his Holy Land. The law requiring, too, that his passport should be *viséd* here, he had another prolonged experience of the ways of Turkish officialdom.

At last, however, all was ready for the final step which should place the Red Sea between him and Egypt; between him and all chance of changing his mind and regaining the safe position of an Englishman. On July 6th, 1854, Burton embarked on a pilgrim ship at Suez, and set sail for the Arabian port of Yambu. The ship, which enjoyed the name of *Silk el Zahab* ("The Golden Wire"), was of about fifty tons burden, decked only on the poop—which was high—two-masted, lateen-rigged, and with sharp bows. The sails had no reefs, there was no compass on board, neither were there log, lead or chart. The ship was eminently liable to shipwreck, and as if to make that contingency more certain, the sixty odd passengers she was calculated to carry had, by the avarice of the owner, been increased to more than a hundred. In the minute cabin—"three feet high," says Burton—no fewer than fifteen women and children were packed, and on the poop a number of clamouring pilgrims had taken up their station.

The first incident of this very novel voyage was a hand-to-hand fight, between the Egyptian and Turkish pilgrims on the one side, and some wild Maghrabis from the deserts of Tunis and Tripoli. The object was to determine who should have the best accommodation on board the ship. Signs of contempt, and observations indicating the like feeling, on the part of the Turks opened the ball, and during the next half hour a frantic fight ensued. Crowded together in the open hold of the ship, Turk and

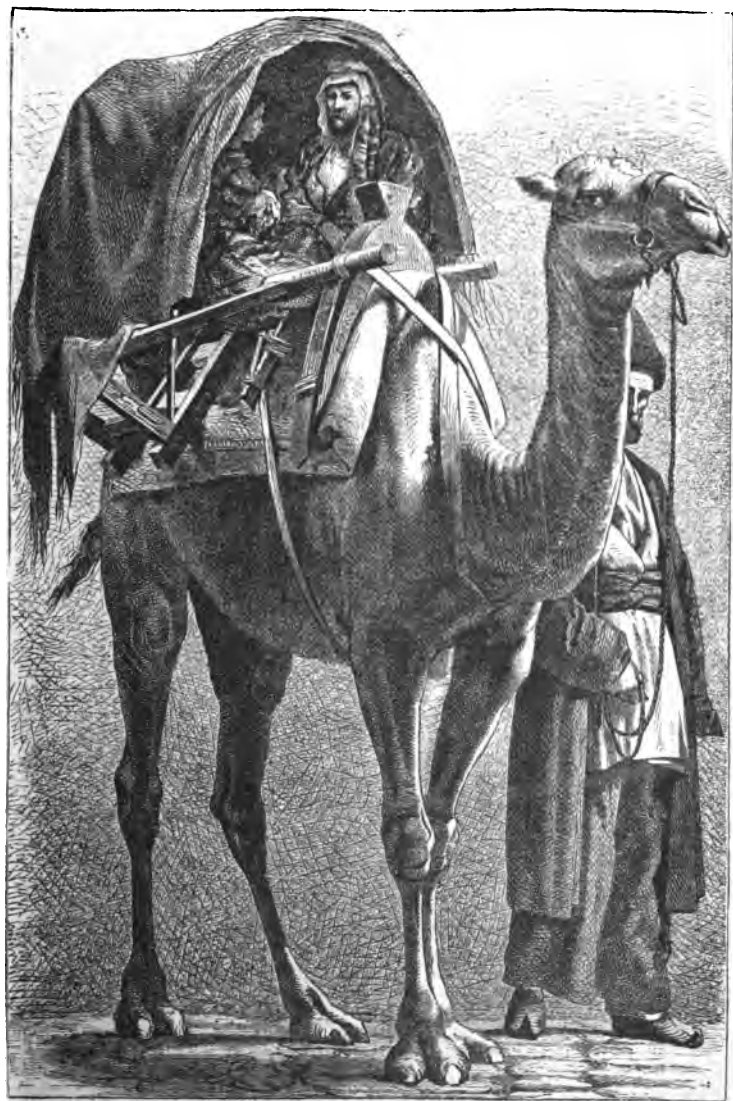
Egyptian and Arab made common cause against the Maghrabis; punching, pulling, scratching, biting, trampling, and screaming being the milder methods employed. Daggers were drawn, stout staves were wielded with right good heartiness, and the butt-end of pistols did excellent work on the woolly skulls of the savage Tunisians. The side which represented the higher civilisation—in a very comparative sense—had the advantage of the poop position, and the long heavy staves, wielded from that eminence, came down with crushing effect upon the seething mob below. Finally Burton, by a happy coup, put an end to a fight of which both parties had had about enough. Upon the edge of the poop stood a huge earthenware jar full of drinking water—a veritable hogshead; just below the assailants were thickest, and, from having received the brunt of the blows, most furious. Suddenly Dr. Abdullah rushed forward, gave the jar a mighty push, and the next moment the wild shriek that arose told how effective an instrument it had been. Bruised heads and shoulders, drenched bodies, and a general panic were the result, followed by the declaration of peace, and a manifestation on the part of the Maghrabis of penitence. There is nothing your dirty unkempt savage dreads so much as cold water; even the Egyptian believes it to be a noxious element to tamper with!

The Red Sea is notably dangerous for navigation. Its coral reefs and wide shoals are so near the surface as to make the passage of a vessel of the lightest draught a matter of difficulty and danger. Consequently the Red Sea sailors only sail their ships by day, when by the broken water they can detect the shoals, and lay to at night when this simple method of navigation fails them. Consequently, the *Golden Wire* lowered its sail at sunset of that first day when well within sight of Suez, and under the lee of that historic mountain, Jebel Atakah—the “Mountain of Deliverance.” The palm trees which cluster round

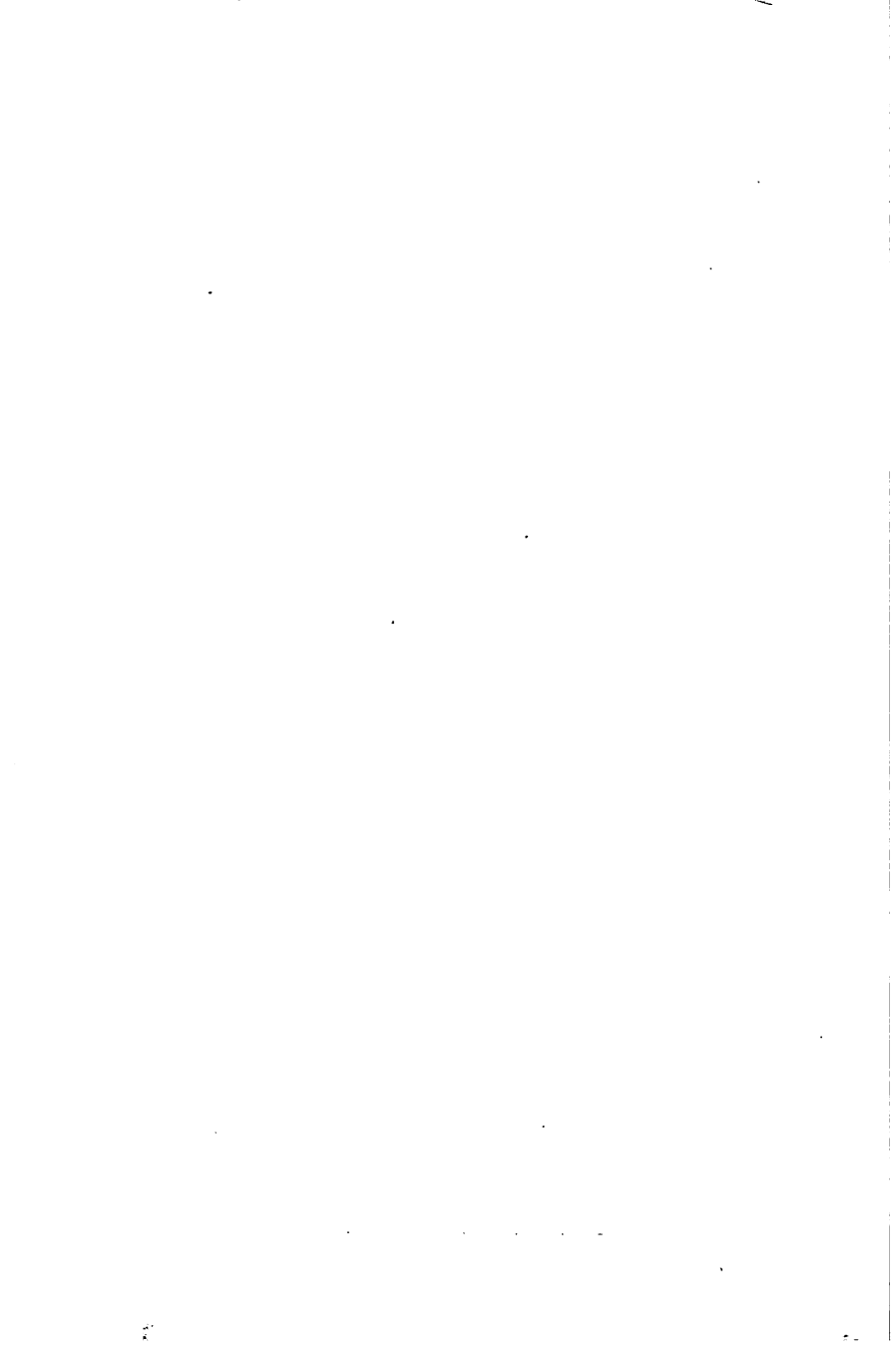
the wells of Moses are visible on the east, and on the west you can look up the valley through which came the children of Israel on their flight to the Red Sea, which here was called, in the Hebrew tongue, the Sea of Sedge. On a calm night, when the stars are mirrored in the surrounding waters, and when the lap of the waves against the ship's side, and the rustle of the breeze amid the cordage of the rigging, make midnight music, sweet to the tired brain of the jaded wayfarer, this halt in the sea, in the midst of such classic country, is very impressive; and we may be sure it was not lost sight of by so impressionable a traveller as Richard Burton.

On the following morning sail was made, and the day passed without any mishap. But the wind was light, and when sunset came little distance had been covered. Anchoring at high tide near a sand-spit, on the following morning the *Golden Wire* was found to be aground, and the sun had wheeled half his course—to use an orientalism—before the ship could be got afloat and the passengers re-embarked. That day they crossed “Pharaoh’s Bay,” a region of currents and counter-currents, and of squalls of wind, and on the following night anchored off the plain of Tur; first an old Phœnician colony, and centuries afterwards fortified by the Portuguese, in those long past days when enterprise and bold discovery led them into every part of the known world.

The next day, the wind being high, no attempt to sail was made, but on July 11th fine weather returned, and the *Golden Wire* spread out her wings again. But the pace was not “flying.” Slow, indeed, was the progress, and painful. The over-crowded poop and hold, the scorching sun, and the wind, like a blast from a furnace, made the pilgrim’s lot almost intolerable. But night fell and with it came coolness, and cold as steel seemed the sea in the light of the moon. And so the days went on—during the daytime vainly endeavouring to crouch out of the reach of the



TRAVELLING IN A SHUGDUF.



sun, and during the night-time revelling in the lower temperature and the dimmed light. At last, twelve days from port, the *Golden Wire* made Yambu—her rais (captain) had been beaten by the pilgrims the night before for not having reached it sooner—and Burton, attended by an Arab servant and accompanied by the indescribably filthy crowd which made up the passengers, landed at Yambu, the port of Medina.

Yambu he found to be a place of no great interest. It lies facing the sea, situated on the western edge of the narrow plain between the coast and the mountain range which runs continuously from north to south along western Arabia. The white buildings of the town spread out along the water-line; the streets are unusually wide, and the houses by no means so crowded as one finds them in most Eastern towns. They are built—as might be expected—of the coralline limestone which is so prevalent along the coast, and have little to boast of in the matter of design or ornament. The town—as, indeed, is the whole of El Hejaz—is under the immediate control of the Sultan. In fact, his rule over the Holy Land of the Mahometan gives him the greatest claim to the title of “Commander of the Faithful,” and clinches the allegiance which so many of the Mahometan nations pay to him. Turkish officials and Turkish soldiers impart that appearance of repose which might otherwise be not so evident in this gateway of the Hejaz, for the people of Yambu are quarrelsome, and full of argument and bigotry. Everyone marches about armed to the teeth, be he holy pilgrim, trader, Bedouin or Egyptian. This not only leads to countless quarrels, but gives an appearance of movement and life to the place, and independent fearlessness to the people, which even the lethargy of Turkish government cannot entirely remove.

On July 18th, after making a variety of further preparations and procuring two camels—one for his servant, one for himself, and both for luggage—

Burton set out on "the pilgrim's way" to Medina. The night before he had dined in the convivial company of a number of fellow-travellers on the usual fare of mutton, cut up in lumps, boiled with rice, and liberally anointed with ghee—a rancid, liquid sort of butter familiar enough to anyone who has travelled in the East. This night he was to pass in the silence of the desert. By the advice of one of his companions he changed his dress to that of an Arab, and moreover was counselled to speak nothing but Arabic when near or in a town or village. The Bedouin, it should be noted, are so contemptuous of everyone not a Moslem of the strictest sect and purest variety, that they will call "infidel" a man of India or Persia, or even of Egypt, Mahometan though he be. These Bedouin are the camel-owners, and they, with their agent or leader—called the sheikh—form an invariable accompaniment to the march across the desert, whether one's goal be merely Sinai, or a journey of the extent of that to which Burton was now committed.

The Bedouin, though a dirty lot, have some points to admire. They are as a rule manly enough; pride they have in great quantity, but they are too truly proud—these natives of the Holy Land—to be impudent or impertinent. They walk with a swagger, but it is not the strut of the Turkish upstart, nor the roll of the Albanian ruffian. Holy men many of them profess to be; warriors all of them are. Villainous robbers and cut-throats at times, hospitable and generous at others. The mood depends chiefly on chance, for if in need the Bedouin never fails to help himself, and if the cutting of a throat or two will save his life—salt of the earth as it is in his opinion—what matters the loss of an infidel or two? Equipped for the journey to Medina or some other city, in charge of a caravan of pilgrims or travellers, he presents a picturesque aspect; and, until one has had experience of his predatory and desultory habits, is thought a most desirable feature in the foreground. The sheikh is

particularly gorgeous in his apparel—and that is no small matter, for in proportion to his position does he heap on the clothes. A very great sheikh will come near death from overdressing rather than forego one garment which he considers necessary to his rank. Fashion, in fact, is a tyrant in the



desert as well as in the drawing-room. Whether he shave his head bare or let his redundant locks fall on his shoulders, he wears a skull-cap of what was originally white cotton; over this he places a kafiya—a large silk

BURTON IN ARAB DRESS.

and cotton handkerchief or shawl—which is generally richly coloured in red, yellow, and green. It is fastened in its place by a fillet of varying material, which encircles the head. The body garment is the *kamis*, the long white gown which is so familiar to all travellers in the East, or, indeed, to any one who has beheld the numerous pictures of Arabs (slave-trading and otherwise), which appear in books and our illustrated press. The *kamis* is girdled with a woollen sash, into which are inserted pistol and dagger, the latter being usually silver-hilted. Burton refers to the fact that such a dagger is taken to be a sign of dignity, and he quotes the Bedouin phrase: "I would silver my dagger," as being equivalent to "I would raise myself in the world." It might here be stated, also, that both gold and silk are forbidden to the Moslem; although, by the way, there are lax Moslems just as there are lax Jews or lax Christians, and both gold and silk may be found in their apparel. The next article of clothing is the long cloak which looks so handsome and drapes so well on the fully-dressed Arab. Though long and voluminous the sleeves are short, and the white sleeves of the *kamis* come below them. It is called the *Aba*, and varies much in colour. Brown is a favourite hue, and so is white. Some are gorgeously striped and many are richly embroidered with tinsel, yellow thread, and even gold thread. This cloak, which is usually made of camel's hair, and is of beautiful texture, is lined with silk and cotton cloth, and tied in front with cords, ornamented with tassels or other appendages. And now, if you put thonged sandals on his feet, sling a much inlaid matchlock over one shoulder and a sword over the other, and put a short spear in his hand, you have the sheikh of the Bedouin—the Arab of the desert—standing before you in "full uniform." I might add that the poorer Bedouin are, naturally, dressed in cheaper material and without much if any attempt at ornament. Often, indeed, they are in rags. But both with poor and rich, with

mere camel driver, sheikh, or the lordly sherif, the weapons are kept in admirable condition. If they do not shine like silver the owner is deemed to be a wretched fellow—a "hen," a poltroon.

Pilgrims of Arab origin generally wear the same sort of garb, with just a slight difference. The pilgrim's cloak, for instance, would be added at times; and everyone would carry the Hamail, which is a pocket edition of the Koran, enclosed in a handsome leather case, which is slung by red cords which pass from the left shoulder to the right side, where the Hamail hangs. Burton made use of this Hamail as a sort of "tourists' companion." Instead of the Koran, he placed his watch (a handsome gold one, which he had put into a copper casing and given an old worn face with Arabic figures), his compass, ready money, pen-knife, pencil, and slips of paper small enough to hide with ease in the palm of his hand. As there was much risk in taking notes, and more in making sketches (the latter being sorcery), he used to make hurried drawings whenever the opportunity arose and then divide the paper into small squares, numbering each in order.

Owing to the various delays incidental to all travel, but oriental travel in particular, the caravan only left Yambu when the sun had set, and the moon shed her white light over the plain. In single file, twelve camels strong, the pilgrims wended their way across the rock-strewn desert; the moon, nearly at the full, overhead, the mountain range of Radhmah far before them. Silently they marched, fearful of a marauding tribe of Bedouin, said to be "out." Half asleep and nodding, they were yet on the alert; their arms were ready and at hand; a sudden noise and they sprang to attention. Their clothing was of the dirtiest and most ragged kind—for did they not wish to appear poor, and possessed of nothing worth the taking? They crouched closely to their bundles and their boxes—for were they not ready to fight to

the last drop rather than yield a piastre's worth of the treasures these contained?

The first halt was called at three in the morning, after an eight hours' march over about sixteen miles of plain. As one camp in the desert is pretty much like another, I may as well describe this, the first made. To begin with, the camels were induced to kneel down by "nakh"-ing them—*i.e.*, by gurgling in your throat a sort of guttural German "Ich," a sound which has become the recognised formula whenever such kneeling is needed. Then boxes and bags, removed from their backs, are ranged together as a sort of redoubt; tents are pitched if there are any to pitch; rugs are spread on the bare ground, and the pilgrims lie down on them to sleep. About eight or nine o'clock next day they rise and light the fire for breakfast. The meal, which is slight enough—consisting as it does of a little rice, a biscuit or two, and a cup of tea or a glass of water—is soon over, and the inevitable pipe follows. After the pipe, shelter is sought behind boxes and camels, and under thick cloaks or blankets, and then the pilgrims invoke sleep. About two o'clock in the afternoon dinner requires wakefulness, and the invariable boiled rice makes its reappearance, accompanied by wheaten bread (leavened with bean flour and oven-baked), ghee and date-paste. This paste consists of dates that have been stoned and pressed, and is both sustaining and agreeable. Water, tea, coffee, and a decoction of curded milk form the usual drinks.

Shortly after three o'clock a start is made. About this hour, accordingly, Burton and his party remounted their camels and proceeded eastwards. They were leaving to the westward the village marked in Burton's map as Musahlah, and slowly approaching the mountainous country which was closing in on either hand. As soon as night fell a cry of "Thieves" was raised in the rear, and after much confusion, and firing, and galloping, and vociferating, the robbers were detected making good their escape to the hills. No further

excitement happened during the rest of the night, and, with dawn, the party entered one of those misyals (or nullahs) which are so characteristic of Arabian and Eastern scenery as to be worth a brief description.

A misyal, then, is equivalent to the nullah of India, the fiumara of Sicily, the kloof of South Africa. It is the bed of a water-course, which is dry during a great part of the year, but which hardly contains the torrent that rolls down it after rain. The hills surrounding it are usually steep, and act as watersheds between misyal and misyal. Down their flanks the water runs in a shallow wide stream, which, when it reaches the misyal, meets the opposing stream, and is lashed into a furious state previous to deflecting its course at right angles and rushing down the misyal. The force is such that huge blocks of rock are torn from the hills, washed down the gorge, and rolled over and over until they are as rounded as pebbles, and rapidly approaching their size. Denudation is carried on at a rapid rate in such valleys, and year after year the bed of the misyal deepens, and the hill-sides appear more abrupt and lofty.

Such a misyal was traversed by Burton for about three hours, and then Bir Said was reached. This name, meaning "Said's well," led our pilgrim to expect an oasis, with palm trees and green grass, browsing flocks and springing water. A deep hole, some brackish water, a few thorns, were all that marked the spot! Thus is Arabia. Camp, however, was pitched, and the day was spent as before.

The march of the next night was through the mountains, over scattered rocks and irregular ridges, up parched valleys—where the very earth seemed to have mouldered away and left the underlying rock grimly bare—until, about midnight, the considerable village of El Hamra was reached. Here they fell in with a large caravan from Mecca—for at El Hamra the mountain route to Mecca joins the road from Yambu to Medina. From here, therefore, their



numbers were largely augmented, and Burton had greater opportunities of observing caravan life. After the usual day's rest the whole party marched, and traversed the twenty-four miles between that place and Bir Abbas—the "half-way house" to Medina—by the next morning.

In spite of the fact that the caravan was now of considerable magnitude, it was attacked in passing through a deep gorge by Bedouin robbers. These fellows knew better than to descend into the valley and meet the cavalcade on equal ground, but they swarmed aloft along the ridge-crest, and, sheltering themselves behind a rude barrier of heaped stones, shot at the pilgrims with impunity. With their long single-barrel guns they managed to make fair shooting, while, on the other hand, the pilgrims did not dare to fire ball; for the death of a Bedouin would have resulted in a general rising on the part of these sons of the desert, and possibly in the annihilation of the whole caravan. Consequently, the pilgrims did the next best thing, which was to fire blank cartridge as hard as they could, thereby enveloping the whole party in a cloud of dense smoke. As it was, however, the Bedouin shot twelve men dead, and gave a larger number of camels their quietus. After running this very unpleasant gauntlet for about an hour, urging on their beasts, shouting imprecations on their foe, and invoking the service of Allah in the most despairing language, the pilgrims came into open country, and the Bedouin, with commendable prudence, did not follow them. This incident gives a very fair idea of the state of travel in El Hejaz. Here was a caravan, between two and three hundred strong, every man armed, and with an escort of irregular cavalry in Turkish pay, and yet it was powerless to resist the attack of these rascally Bedouin. On the open plain a charge might have been made without resulting in actual harm to the oppressors, but yet of sufficient proportions to create a panic among them.

As it was, the attacked were hemmed in the gorge, and dared not respond with shot or bullet for fear of inflicting mortal injury; for if you shoot a Bedouin, even in the very act of plundering your goods or attacking your person, you are doomed. Sooner or



AN OASIS IN THE DESERT.

later your bones will find a long rest in Arabian soil.

On July 24th, after crossing the "blessed valley" of Wadi el Akik, Burton and his party arrived at the Mudarraaj—the famous flight of steps which are cut up the ridge which lies to the immediate west of the

plain on which El Medina is situated. Near the top the road is cut deep through the rock, and becomes a sort of "hollow lane"; the summit reached, one looks down over the sacred city, lying in a country of gardens and orchards which seem indescribably fair after the treeless wastes of the desert. Everybody dismounted from their camels and gave vent to poetical and pious exclamations:

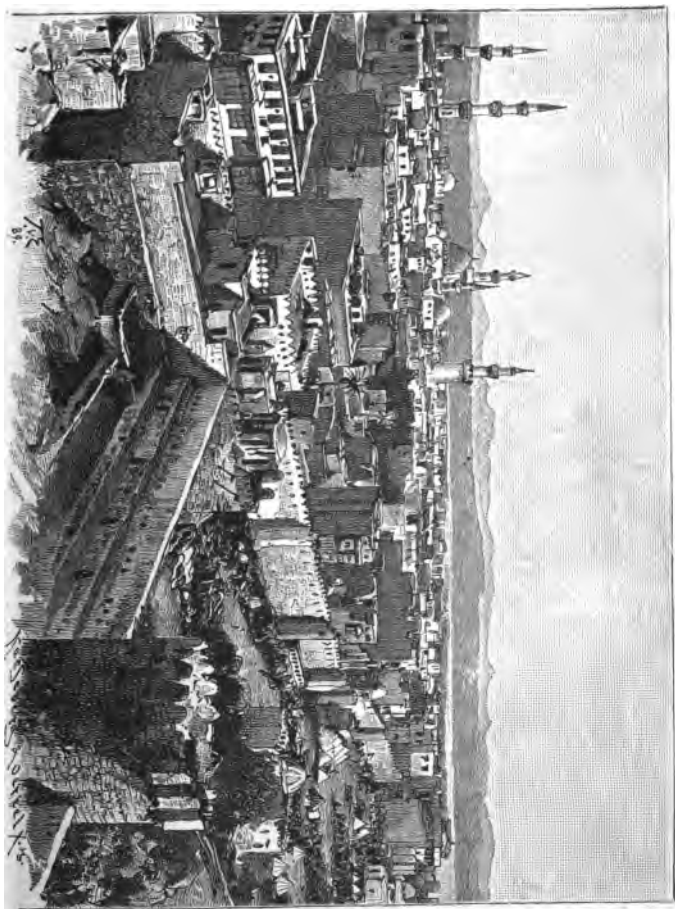
"O Allah! this is the sanctuary of the prophet! Oh, open the gates of thy mercy, and let us pass through them to the land of joy!"

"O Allah, bless the last of the prophets, the seal of prophecy, with blessings in number as the stars of heaven, and the waves of the sea, and the sands of the waste—bless him, O Lord of might and majesty, as long as the cornfield and the date-grove continue to feed mankind!"

"Live for ever, O most excellent of prophets! Live in the shadow of happiness during the hours of night and the times of day, whilst the bird of the tamarisk * moaneth like the childless mother, whilst the west wind bloweth gently over the hills of Nejd, and the lightning flasheth bright in the firmament of El Hejaz!"

Burton tells us that he could not escape the contagion of such enthusiasm, and, for a while, he became like a true devotee of the prophet. Shortly after, however, he recollected himself, and began to make a sketch of the city, and to take notes of what he saw and heard. It had taken nearly eight days to travel from Yambu to Medina. The distance is rather over one hundred and thirty miles. Burton points out that if, instead of travelling in slow caravan fashion, he had been mounted on a dromedary, and had been with a party who wished to travel quickly, the journey could have been made in less than a third of the time. A "day's journey" in the East, therefore, may bear two very different meanings.

* The dove.



MEDINA.



The situation of Medina is remarkable. It lies in a vast basin, formed on the east by the mountains which are the western barriers of Nejd, the great central division of Arabia, and a rocky plateau; on the north by the mountain mass of Ohod; on the south by that of Jebel Ayr; and on the west by the steep ridge of basaltic scorïæ over which, as we have seen, travellers from Yambu have to pass, and from which they obtain their first view of the prophet's burial-place. The plain is of that dull yellowish hue which pervades Arabian landscape, and which Burton aptly calls "tawny"; but the environs of the city are green with groves and gardens. Medina is surrounded by walls, which at frequent intervals rise into turrets. Approaching it from the west, one first passes through a suburb—also walled—which is entered by the Ambari gate. On the left hand stands a domed building for dervish pilgrims, and on the right the long low barracks of the Turkish soldiery. Passing along the wide street—on and near which are many houses in a state of ruin—the mosque of Omar, standing in an open space, is reached. To the left is a large palace, and a little beyond is the prophet's prayer-place. Keeping straight on, a very wide thoroughfare opens up left and right; and that part on the left contains many fine houses facing eastward toward the burial place of Mahomet, as well as a fountain, coffee-house, and fruit and grain bazaars. That on the right leads to enclosures occupied by date-groves and gardens of palm. As one stands in this open space, facing east, the vast dome and the four great towers that mark the spot where lie the prophet's bones loom large before the sight, over the walls of the actual city, which are exactly in front of the spectator. Diverging a little to the left, you pass between the fruit and grain bazaars, and thus enter through the Egyptian gate into the holy city. A street which sweeps away to the right, and afterwards to the left, brings you to the threshold of the "haram"—the prophet's mosque, the

sanctuary. It is closely surrounded by domestic houses, and loses something of importance thereby; but the great green dome and the lofty towers are very handsome and impressive. Beyond the haram the city soon comes to an end, and the Nejd gate leads out through groves, gardens, orchards, and fields to the escarpment of the Nejd plateau. South of the haram the city continues for some distance, and then come again gardens and groves. South-east of the city is the great cemetery, and the tombs of Ibrahim, Abbas, and other great saints. On the north-east the groves are continued, and due north rises the mass of Ohod. Thus it will be seen that a continuous wall surrounds both city and suburb—the name of this suburb is El Munakhah, the name really meaning where the camels kneel down, or rest, after their journey—that a second wall divides the city from the suburb, and that a wide open space also intervenes; that the prophet's mosque is in the extreme east of the city and nearer the northern than the southern side; and that north, east, and south, Medina is environed by groves of date, gardens and orchards, and fields of corn.

Burton put up at the house of one Sheikh Hamid, which faced the open space between suburb and city. He was thus able to watch the approach of pilgrims, and observe their habits when assembled *en masse* in this open space, known as Baar el Munakhah,—the plain, or, perhaps, *plaza* of Munakhah. He has given us a very interesting account of life in this Arab house, which he describes as representative of the respectable and well-to-do middle-class home. His whole chapter on this subject I will therefore endeavour to condense into the two pages for which I have room.

The ground-floor of the house is taken up with a sort of crypt—a series of dark arches used for storage, chiefly of rubbish; and, therefore, on entering such a house you would at once go up the dark stone stair-

case which brings you to the first floor. Here the men live. Here the host entertains his friends. Here is practically all that you would see of the house. Let me then describe it. On reaching this floor two rooms open out on one side and one long room on the other—a darkish passage running between. Of the two rooms one is the “majlis,” or sitting room, the other also a sitting or waiting room, and frequently used for storing goodly shawls and blankets and handsome arms. You enter these rooms from the passage, by which means also you enter the long room at the back of this floor. This room—it is windowless—contains a large copper vessel, which is the equivalent of our bath, and other arrangements necessary for “purification.” The majlis, or sitting room, has small windows, screened by reed blinds, and affording in their wide cushioned window-seats a cool and delightful place of repose in early morning and through the evening. Raising your eyes, you are at once struck by the curious ceiling; its rafters are of palm, painted red, and across them are laid, as laths, date-sticks. Turning round, you notice that the walls are rough, being largely made of coarse bricks, plaster, or lime-washed wood. But on them hang some handsome pistols, a sword or two adorned with rich silken cords and prodigious tassels, and some six or seven as fine cherry-wood pipes as you would wish to see. The floor is wooden, and overspread with a large and handsome carpet, in the centre of which stand several shishas, or hookahs, for the use of guests. Of furniture as we understand it there is none, but all round the room runs the divan, which is a wooden or cement platform a yard wide, and rising with a slight slope from a few inches above the floor back to the wall. This dais, as it were, is covered with large cushions upholstered *en suite* in chintz or silk. They are very comfortable, and can be arranged so as to suit the passing fancy of the user, either as an upright low chair or as a most voluptuous couch. I should add

that the divans are also made up on the level floor. This is practically the sum total of furniture in an Arab's drawing-room—but stay: against the wall over there projects a stone slab, a sort of bracket-table, supporting, maybe, a bottle of perfume, an empty coffee cup, or a book or rosary, or what not; and on the floor, in one of the corners, you will be sure to see a copper brazier for making that coffee which is ever and always in demand.

Upstairs, on the second floor, are the kitchen and the apartments of the women. These are not to be seen by man; but they have been described by one or two adventurous ladies—Miss Martineau, for instance—who have travelled in the East. They are usually dark, owing to the windows being wooden screens slightly pierced. Each wife and concubine has a separate room, or rooms; they all open on to a wide gallery, which is also jealously screened from the sight of man or the light of heaven. The latter, however, is usually admitted from the court-yard, or from some small space where the foot of man cometh not. As to the bedrooms of the men, there are none—at least usually; and Burton, in company with all the other male guests, slept every night in the open air, each on his own mattress, spread on the ground before his host's door.

This was the rule of the day. At dawn, arise, wash, pray, and eat a crust of bread, and then drink coffee and enjoy the first pipe. Then dress, and visit the prophet's tomb or some other holy place. Return early and smoke and coffee again. Dine one hour before noon, in the majlis. Dinner having been brought in on a large burnished copper tray, the Moslems say a short but sufficient grace—"Bismillah" (in the name of Allah!). Meat and vegetable stews form the *pièce de résistance*, and everyone dips his bread into the dish, and eats it. Next would come boiled rice—eaten with spoons. Then dessert, composed of grapes, pomegranates, and fresh dates and other fruits. After

dinner each would seek some dark corner in the divan, or in the outside passage, and smoke and doze alternately until the hour of receiving guests arrived. This involves a great deal of noise and excitement—voluble conversation, dramatically recited anecdotes, and the like. Then comes evening prayer, either held in the house or attended in the mosque, and finally a supper as substantial as the dinner; pipes and coffee, of course, to follow. Conversation and “early to bed” concluded the day. On the whole, considering that these people were taking a sort of holiday, it may be asked if the average Englishman, when similarly engaged, behaves himself as well. I am inclined to think that the early and regular hours, and the consideration which Allah receives at the hands of the Moslems, are factors which find no counterpart in the holiday hours of most Englishmen of the middle or any other class.

But after all said and done about life in Medina, it must not be forgotten that “the mosque’s the thing.” To the mosque, therefore, we must accompany Burton, as he carries his life in his hand; the mock-Mahometan, the pseudo-dervish. Externally the mosque has little ornament, and internally the place is tawdry. “It is not,” says Burton, “like the Meccan mosque, grand and simple, the expression of a single sublime idea; the longer I looked at it the more it suggested the resemblance of a museum of first-rate art, a curiosity shop full of ornaments that are not accessories, and decorated with pauper splendour.”

Nevertheless, it contains the prophet’s tomb. That is sufficient for the Moslem, and that places Medina second among the holy cities of his world; the first being Mecca, next Medina, and last Jerusalem. The mosque measures over 400 feet one way and 340 feet the other. The long walls are east and west. In the south-east corner are the tombs of Mahomet, and those of Abubekr and Omar, his successors. They lie in what was the chamber of Ayésha, Mahomet’s last

and favourite wife, and in whose arms he died. (It should be remembered that the haram was the great palace of Mahomet.) This chamber, or Hujrah, is about 50 feet square, and between it and the outer wall—the space traversed by the pilgrims, who only look into the hujrah through three windows—the corridor is about 25 feet wide. To the west of the hujrah one-third of the whole mosque is taken up by “the garden,” which is a vast colonnade, and a most ornate affair. It is intended to personify its name, and the columns are cased in green tiles, the carpets figured with flowers, and vegetation flourishes everywhere—in arabesque. Lighted at night with dim lamps the effect is curious and solemn, but by day it is merely gaudy. Northward of this “garden,” and across a flagged passage, is the large space devoted to the Lady Fatimah’s (Mahomet’s favourite daughter) garden, the prophet’s well, and the vast colonnades on either side. Beyond these, and forming the northern façade, is an unfinished portico.

Now let us follow Burton into that holy of holies. Well that his knowledge of the Arab’s ritual was so deep! Well that in every motion, in every look, in every word he was a Mussulman! Well that his disguise was so perfect that the fanatics of Medina knew not the profanation of his presence! Had they but half a suspicion that all was not right—but, happily, they had none! He was now about to perform the sacred duty of “visitation,” or ziyarat. Entering the gate in the south-west angle of the mosque—the gate of safety—he formed one of a vast crowd of pilgrims. Placing his hands together and holding them to the left of his body, the palm of the right resting on the back of the left—the position of prayer—he paced slowly along the southern corridor of the mosque, reciting a long prayer full of mercies for himself and blessings for the prophet. Then, after walking across about a third of the breadth of the mosque, he turned to the left and entered “the garden.”

"Between my tomb and my pulpit," said the prophet, "is a garden of the gardens of paradise." The pulpit Burton had found between the gate of safety and this entrance to the garden. On entering it, his eyes rested on the magnificent lattice-work railing which shuts off the chamber from the garden. Immediately he began reciting more prayers, proper to the moment; then he prostrated himself in honour of the temple; then recited two chapters of the Koran (109th and 112th), next the "declaration of unity" (thus—"Say, He is the one God! The Eternal God! He begets not nor is He begot! And unto Him the like is not!"), and, finally, another prostration—in gratitude to Allah for having been enabled to visit the mosque. Then comes almsgiving—and the poor and needy were at hand in force. After this the pilgrim paced out again into the southern corridor, and then, turning sharply to the left, proceeded towards the hujrah, invoking blessings on the prophet all the while. In a minute or two the first of three small windows, about six inches square, and inserted in the low wall which shuts the chamber off from the rest of the mosque, is reached. This is the prophet's window. Through it one gazes upon—not the prophet's tomb, but the curtain which hides the place where the tomb is said to be. A splendidly worked brass screen—plated just here with silver—keeps the faithful from hope of entrance, and another screen inside bars out the attendants of the mosque from intrusion. Through these screens one gazes on the curtain, with its legend written in great gold letters, and the site of Mahomet's tomb indicated by a pearl rosary hung from the curtain. The tomb of the prophet is supposed to be exactly opposite this window, and those of Abubekr and Omar are beyond, one behind the other, in echelon. There is a fourth tomb-space, which, curiously, is reserved for Isa bin Miriam (Jesus, the Son of Mary), when He shall come again on earth.

But it must not be supposed that our pilgrim could

just come up to the window and, staring through it for a few moments, then pass on. That is not the Moslem's way. Standing several feet from the outer railing, and opposite the window, with hands raised and voice lowered, a long prayer and benediction had to be recited. "Peace be with thee, O prophet of Allah! Peace be with thee, O chief of the prophets! Peace be with thee, O thou bright lamp! Allah bless thee as often as mentioners mention thee and forgetters have forgotten thee!"—and so on for about ten minutes. Burton went through the whole ceremony twice, as he had promised to perform the ziyárat for the old sheikh at Cairo with whom he studied the Koran. And after the ceremony of the prophet's window had been concluded, there were still the windows opposite the tombs of his successors, and at which the *pax tecum* ritual had to be repeated. That performed, the ziyárat, or visitation, was at an end, and the pilgrims were free to wander round the mosque and inspect its relics and especially sacred spots.

The incidents of Burton's stay at Medina—deeply interesting though his record of them be—must be passed over here. We have to accompany him to Mecca, and thence back to its port, Jeddah; and the way is long and there is much to note.

On August 31st, Burton left Medina for Mecca. The previous day he had been busily engaged in preparing for the journey, which was to be down the Darb el Sharki, the route through the Nejd desert; a route till then unknown to the European save through the adventures of Harun el Raschid, and in other eastern histories. As everybody was too busy to give or sell their labour, "Dr. Abdullah" had to do much of his own work; and though his hospitable host, Sheik Hamid, arranged for his camels, and his Meccan servant attended to the saddle-litters to be slung across them, he was employed most of the day in mending the water-bags, sewing up sacks of provisions, packing his medicines and the like. A

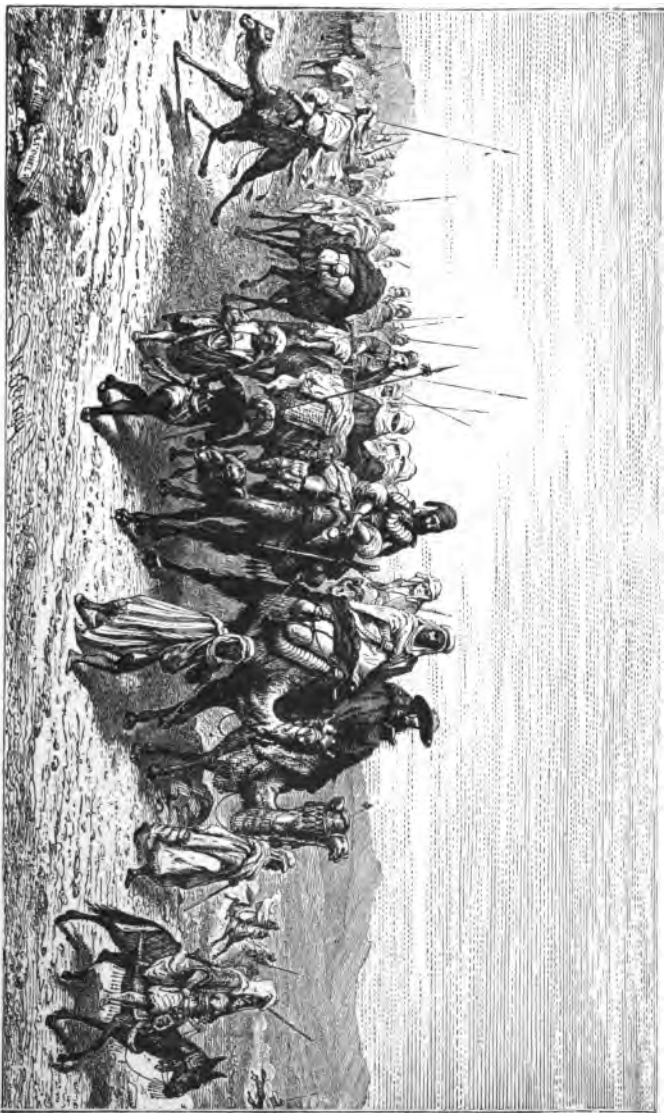
compagnon de voyage from Yambu—Omar Effendi by name—paid him a visit, and expressed a desire to journey with him to Mecca; his host gave utterance to the same desire, and, altogether, his last hours in Medina were pleasantly lengthened by friendship as well as shortened by work.

Early on the 31st, Burton—taking leave of a large group of friends at the Egyptian gate—mounted his camel, and accompanied by the Meccan youth and the “slave” who had done menial work for him throughout the journey, passed out of the city toward the north, and after surmounting the range of hills in that direction descended their eastern slope. Volcanic and lava-bedded were these hills, but though he often sought for traditions of eruptions, he could hear of none. Then the course lay southward, and an hour or so after the sun set his party reached the spot where the great body of pilgrims had camped. The caravan was very large, as the second and more rapid one, which usually followed the first after a short interval, had been discontinued. In command was a Turkish pacha, attended by guards and a troop of soldiery. A few minutes sufficed to raise a small tent, to unload the camels, and to make coffee. After discussing this and a pipe, the traveller found his light supper of rice, pulse, mutton and fruit ready; and, this digested, sound sleep was not slow to come to him, lying on the mattress spread upon the sand. This first halt was made at Ja el Sherijab, which is on the confines of Nejd and El Hejaz.

Early the next morning (3 a.m.) a start was made, and I will here quote Burton himself, as he gives at this juncture an excellent description of the appearance of the caravan. “This,” he says, “was most striking as it threaded its slow way over the smooth surface of the khabt (a low plain). To judge by the eye there were at least seven thousand souls on foot, on horseback, in litters, or bestriding the splendid camels of Syria. There were eight gradations of pilgrims.

The lowest hobbled with heavy staves. Then came the riders of asses, camels, and mules. Respectable men, especially Arabs, mounted dromedaries, and the soldiers had horses; a led animal was saddled for every grandee, ready whenever he might wish to leave his litter. Women, children, and invalids of the poorer classes sat upon a 'haml musattah'—bits of cloth spread over the two large boxes which form the camel's load. Many occupied shibriyabs (cots); a few, shugdufs (covered cots), and only the wealthy and the noble rode on takhtrawan (litters), carried by camels or mules. The morning beams fell brightly upon the glancing arms which surrounded the striped mahmal, and upon the scarlet and gilt litters of the grandees. Not the least beauty of the spectacle was its wondrous variety of detail: no man was dressed like his neighbour, no camel was caparisoned nor horse clothed in uniform, as it were. And nothing stranger than the contrasts; a band of half-naked Takruri marching with the pacha's equipage, and long-capped, bearded Persians conversing with Tarbushed and shaven Turks."

The next day, the camels having been ninety hours without water, an expedition was made by the sheikh and the Meccan youth in search of that precious element, and Burton availed himself of the opportunity to write up his notes. The moments were few on the journey when he could do so with absolute safety; but he was a practised note-taker, and as a result we have his deeply interesting work. But to return to the march through the desert. On September 3rd the camp was struck about 1 a.m., and after journeying for four hours, the caravan entered a wide rocky basin, surrounded by low hills. Dry and wiry camel-grass, a few wretched acacia bushes, were all the vegetation; the only signs of water were the mudflakes of vanished pools. Crossing this desolate scene there followed a sharp and rugged ascent over huge blocks of volcanic rock, in the interstices of which a few thorn bushes had found a pocket of earth, and led a



CARAVAN EN ROUTE.



precarious existence; the descent of the other side was equally difficult. Then another basin was crossed—gravel and clay, derived from the surrounding hills, being the soil—and yet another terrible ascent and descent. Occasionally the monotony was varied by that pleasant “aspect of nature,” an acacia-barren. This is a wild plantation of villainous thorn-trees, from which there is no escape without injury of greater or less character to one’s own clothes and skin, and to one’s camel and load. After passing such a barren a diversion might be created by a sandstorm, in which vast pillars of sand would rush with whirlwind speed across the plain, driving man to bury his head under the thickest blanket he owns, and sometimes even throwing the camels to the ground. Or the simoom might blow its fine particles of sand over you, choking up the pores of the skin, and preventing the escape of perspiration—that safety-valve of heat. Then, when water was low in the bags, and when camels rolled their eyes and lolled their tongues for thirst, a large lake-like pool would appear a few miles away, and only on nearer approach would the travellers realise another of the disappointments of the desert—the deceptive mirage. Here and there, too, the vulture-torn carcase of horse or camel would remind the traveller of the dangers of these wastes, and of the lot that had befallen those who had gone before them in the way. Such is the desert of Arabia, and such the experience of those who attempt its almost trackless wilds.

El Suwayrkiyah, the principal town between Medina and Mecca, presents a striking appearance to the wayfarer. A large mass of basaltic rock rises ruggedly from a surrounding plain. Its sides are weathered into clefts and bulging shoulders, and its summit has been ground down by various natural agencies to an almost perfectly flat platform. On the talus slope, which falls steeply to the plain, the town is built; and a wall, intersected by towers, encircles the houses and is carried round to where the rock is steepest. Beyond

the town are fields where wheat and barley are cultivated, and at several points fine date-groves are seen. The hard, sun-baked mud houses, the tortuous and narrow streets, the bazaar, even the quality of the water, are all essentially of Arabia.

On September 5th, the caravan was travelling through a particularly wild part of the desert. The hills had disappeared and given way to a rough tableland, the scenery of which Burton describes as peculiarly Arabian—"a desert peopled only with echoes; a place of death for what little there is to die in it; a wilderness where, to use my companion's phrase, there is nothing but HE (Allah). Nature, scalped, flayed, discovered her anatomy to the gazer's eye. The horizon was a sea of mirage, gigantic sand-columns whirled over the plain, and on both sides of our road were huge piles of bare rock, standing detached upon the surface of sand and clay. All are of a pink, coarse-grained granite, which flakes off in large crusts under the influence of the atmosphere. There was not a trace of human habitation around us; a few parched shrubs and the granite heaps were the only objects diversifying the hard clayey plain."

It will throw some light on the character of the Bedouin camel-drivers if I here relate an incident that occurred about this time. A dispute arose between a Turk and his camel-driver concerning a bundle of dry sticks for making a fire, which the former wished to add to the load of his camel. As often as he placed this bundle on the load so often did the Bedouin throw it off. Vituperation, of course, became the order of the hour, and in the midst of the yelling and the hustling, the Turk gave the Arab a heavy blow. That night the haji was killed; with an Arab dagger his body was ripped up, and a small trench having been dug, all that remained of him was thrown into it. Such is the revenge of the son of the desert.

On September 7th the caravan reached El Zaribah, and here, Burton, in common with the rest, assumed

the pilgrim's garb which he had brought with him from Egypt.

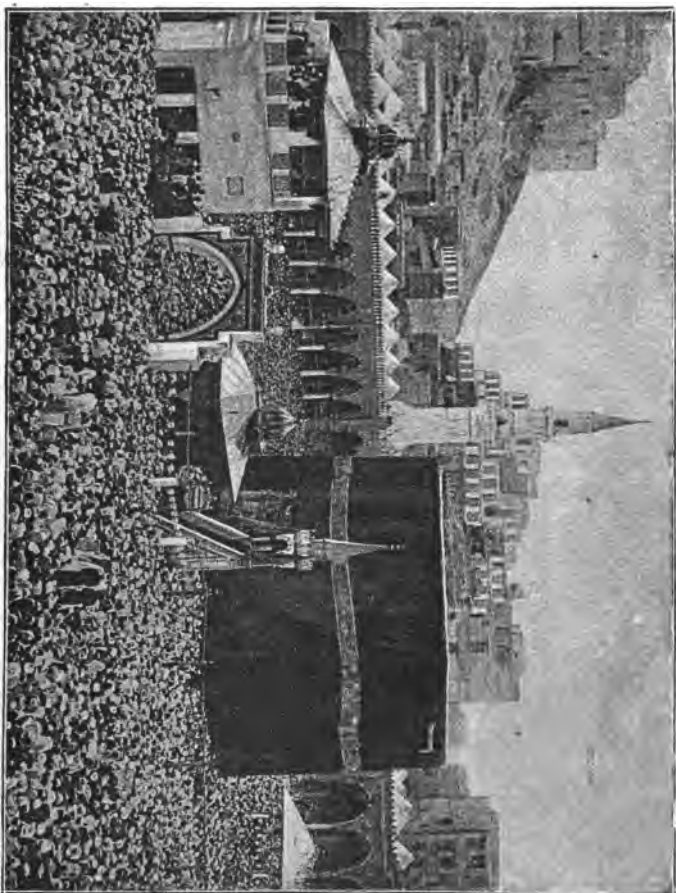
There is, of course, a considerable amount of ceremony attached to the process. Heads had to be shaved, nails cut, moustaches and beards trimmed; a bath and a perfuming followed, and then the garb was put on. This—called “el Ihram”—consists of “two new cotton cloths, each six feet long by three and a half broad, white, with narrow red stripes and fringes; in fact, the costume called ‘el eddeh’ in the baths at Cairo.” One of the cloths is worn like the Malay sarong, and the other forms a shawl, which passes over and covers the left arm and shoulder and leaves the right arm and shoulder bare. On the right hand side, just above the hip, this cloth is knotted. The heads of the pilgrims are now bared, and the upper part of the foot is also left bare; special sandals generally being bought for this part of the pilgrimage.

The pilgrims were then placed looking toward Mecca, and having vowed the hajj to Allah and performed various prostrations and other formulæ, were directed by a venerable sheikh as to their new duties. In the first place no ordinary vices were to be practised; then no living thing was to be slain—this being carried to such a length that no one was to scratch himself, except with open hand, “lest vermin be destroyed, or a hair uprooted by the nail.” Not a single blade of grass was to be plucked nor the least twig broken off from a tree. And so on, and so on; each breach of the rules requiring the sacrifice of a sheep. And yet, such is the respect yielded by the Bedouin and the rule enforced by the Turk, that shortly after all this had taken place, the caravan was attacked while passing through an evil-looking gorge by a party of Bedouin. “A small curl of smoke,” says Burton, “like a lady’s ringlet, on the summit of the right-hand precipice, caught my eye, and simultaneously with the echoing crack of the matchlock, a high-trotting

dromedary in front of me rolled over upon the sands—a bullet had split his head—throwing his rider a goodly somersault of five or six yards.” The confusion and panic were great: the mounted guards proved themselves as only good for ornamental purposes (though, by the way, not very good even for these), and the pacha with his great officers sat down under a sheltering rock, where, on spread carpet and with pipe in hand, he debated the position. Fortunately someone acted: the Wahhabis, wild, unkempt, but brave fellows as they are, clambered up the steep side of the gorge, and in a very short time the exchange of shots at a continually increasing distance proved that they had put the robbers to flight.

An hour after midnight, on September 11th, loud cries of “Mecca! Mecca!” “The sanctuary! O the sanctuary!” mingled with sobs and tears of excitement, announced that the prophet’s birthplace was in sight. An hour later, Burton entered the house where he was to stay during the pilgrimage—the home of Mohammed, his Meccan servant.

The great attraction of Mecca is, of course, the Bait Ullah—the house of Allah, sometimes called the “Kaabah,” the words being synonymous. And the most notable architectural features of the Kaabah are the marble, granite, and porphyry colonnades, and the hundred and fifty domes, of its enclosure; the great grey Mecca stone blocks of the Kaabah, and its flat roof, which gives the whole the appearance of a cube. The most sacred thing in Mecca is the Black Stone, and I may here quote Burckhardt (who entered Mecca when the Egyptian army, under Mahomet Ali, held the town). “At the north-east” (Burton says, south-east) “corner of the Kaabah, near the door, is the famous Black Stone; it forms a part of the sharp angle of the building, at four or five feet above the ground. It is an irregular oval, about seven inches in diameter, with an undulating surface, composed of



PILGRIMS IN THE KAABAH.

about a dozen smaller stones of different sizes and shapes, well joined together with a small quantity of cement, and perfectly well smoothed; it looks as if the whole had been broken into many pieces by a violent blow, and then united again. It is very difficult to determine accurately the quality of this stone, which has been worn to its present surface by the millions of touches and kisses it has received. Its colour is now a deep reddish brown, approaching to black. It is surrounded on all sides by a border. This border serves to support its detached pieces; it is two or three inches in breadth and rises a little above the surface of the stone. Both the border and the stone itself are encircled by a silver band"—Burton says "gold or silver gilt"—"broader below than above and on the two sides, with a considerable swelling below, as if a part of the stone were hidden under it. The lower part of the border is studded with silver nails."

Besides the Black Stone, there are the spot where Abraham and his son Imail are supposed to have mixed the chalk and mud used in building the Kaabah; on the north-west side of the mosque, the golden water-spout which collects the rain that falls on the roof and projects it on to the ground below; opposite each of the four sides of the Kaabah the four pavilions from which the Imaums of the strictest sects of Moslems direct the worship; quite close to the Kaabah, nearer to it than any other building in the large surrounding square, is a small edifice, said to be the praying-place of Abraham; and on the same side is the magnificent white marble pulpit whence the sermon is preached every Friday, as well as on certain festivals. Another feature of the mosque is the multitude of gates; there are nineteen of them, some being large and very handsome, others consisting of a simple archway. High above, tower the seven minarets of the mosque.

Let us now go with "Dr. Abdullah" to the mosque, to watch him act the Mussulman to the life.

Burton was much moved when he found himself within the sacred walls—Mecca had been to him a cherished desire for years. Fear and awe hold the Moslems as they enter it; “the ecstasy of gratified pride,” the fulfilment of many days of toil and danger, moved “the haji from the far north.” Advancing through one of the gates, with hands uplifted, the pilgrim repeated various prayers and benedictions, and then drew his hands in orthodox fashion down his face; then, passing slowly to the open pavement near Abraham’s prayer-place, performed the required prostrations in veneration of the holy site. Next he drank a cup of holy water from the well Zem-zem, and “bakshish’d” the carriers. And now he was ready to look upon the Black Stone. Slowly pacing towards it, raising his hands and exclaiming: “There is no God but Allah,” etc., etc., he arrived before the stone. Not being able at that time to reach it—so great was the crowd of pilgrims—he performed a number of “pious” acts, raising his hands to his ears, making declarations of good conduct, blessing the prophet, and kissing the finger-tips of the right hand. He then began the tawaf, or circumambulation of the Kaabah, and this he completed seven times; at every door and corner reciting a special prayer. After this Burton kissed the sacred stone. I quote his own description, as it is amusing, and gives a good idea of the peculiarities of the scene:—

“For a time I stood looking in despair at the swarming crowd of Bedouin and other pilgrims that besieged it. But the boy Mohammed was equal to the occasion. During our circuit he had displayed a fiery zeal against heresy and schism, by foully abusing every Persian in his path; and the inopportune introduction of hard words into his prayers made the latter a strange patchwork; as ‘*Ave Maria purissima—arrah, don’t ye be letting the pig at the pot—sanc-tissima,*’ and so forth. He ought, for instance, to be repeating: ‘and I take refuge with thee from

ignominy in this world,' when 'O thou rejected one, son of the rejected!' would be the interpolation addressed to some long-bearded Khorassain—and in that to come'—'O hog and brother of a hoguess!' And so he continued till I wondered that no one dared to turn and rend him. After vainly addressing the pilgrims, of whom nothing could be seen but a mosaic of occiputs and shoulder-blades, the boy Mohammed collected about half a dozen stalwart Mecans, with whose assistance, by sheer strength, we wedged our way into the thin and light-legged crowd. The Bedouins turned round upon us like wild cats, but they had no daggers. The season being autumn, they had not swelled themselves with milk for six months, and they had become such living mummies that I could have managed, single-handed, half a dozen of them.



BEFORE THE BLACK STONE.

After thus reaching the stone, despite popular indignation, testified by impatient shouts, we monopolised the use of it for at least ten minutes. Whilst kissing it and rubbing hands and forehead upon it, I narrowly observed it, and came away persuaded that it is a big *aërolite*."

Various other ceremonies had to be observed in the wide space between the Kaabah and its outside walls, and finally, after an exhausting pilgrimage of six hours, Burton returned to the house where he was staying. Late in the evening he paid another visit to the Kaabah, and remained till two hours after midnight to see if the mosque would be empty; but the crowd never seemed to decrease. He tried to remove a relic, but too many eyes were watching; he, however, managed to step and span most of the distances he wished to measure, and in dark places used a tape with perhaps more boldness than discretion. Then he returned through the streets of the town, guided by a bright moon. No watchmen were about, none seemed needed; people were sleeping on all sides in cots laid upon the ground and opposite their own doors, and their sleep was as peaceful as that of the just—or the wearied. The Holy City was wrapped in slumber, save within the walls of the Kaabah, where the cry of the faithful for ever went up. Indeed, the Meccans boast that their mosque is never without a worshipper engaged in the holy rites of hajj.

An instance of the shrewdness of Mahometan ways may be found in the comparatively brief stay that pilgrims are allowed to make in Mecca. The idea is either that after a religious outburst an outburst of another kind might occur, or that "familiarity breeds contempt." At any rate, pilgrims do not stay long in the Holy City, and perhaps it is as well they do not, for, although a good deed done there is rewarded a hundredfold, an evil deed is requited seventyfold. Burton, therefore—like any other haji

—after visiting the many sacred spots in and around the city, the tomb of Khadijah, the first of Mahomet's wives and the only one buried at Mecca, included, made ready to start for Jeddah.

The road to Jeddah is fairly safe to the Mahometan—so well traversed is it; but on that account, perhaps, the more dangerous to him who plays the part. Fortunately, however, beyond a few accidents common to a caravan life, to the pilgrim's way, "Dr. Abdullah" was able to preserve his character as a good Moslem, and, after a rapid journey of forty-five miles upon the small but sturdy donkeys of this part of El Hejaz, he arrived safely at Jeddah. And here, after a brief rest, and making himself known to the English consul (with a view partly to cash an order on the Royal Geographical Society), he embarked on board the steamship *Dwarka*, and returned to Suez. His pilgrimage was at an end; the haji had performed his hajj; "Dr. Abdullah" was to be metamorphosed into plain Richard Burton, a lieutenant in the Bombay Army; and rumours were to spread among the Moslems of El Hejaz that a sahib from India had "laughed at their beards."

But the journey had been an unqualified success, and both in the rich result of his persistent note-taking, and in the daring and consummate ability that had made it possible, the pilgrimage of Richard Burton was immediately placed among the famous journeys of the century. Bearing his life in his hand, he had gone where no European had penetrated, and had once and for all taken away Gibbon's reproach: "Our notions of Mecca must be drawn from the Arabians; as no unbeliever is permitted to enter the city, our travellers are silent."

His recent death recalls this and many another journey as difficult of achievement, and as replete with result. The personal traits which so largely characterised and, indeed, made possible this pilgrimage to Mecca, served him throughout the whole of his

wandering career. "Few men," says the writer of the memorial notice in the "Proceedings of the Royal Geographical Society," "have been so persistent, both as students and as wanderers, and have made larger contributions to the literature of travel than he. In all his works he was constantly drawing on his vast stores of recondite learning, so that often the reading of his books is no easy task. He was a keen and accurate observer, indefatigable in taking notes, and a forcible and original writer. . . . He was a man of the greatest intensity of character and fearlessness in thought, speech and action"; and, I might add, though he made not a few enemies by his unflinching exposure of false conventionalities, he drew to himself many a friend, staunch and devoted for all time.

STUART'S JOURNEYS ACROSS
AUSTRALIA.



JOHN MCDOUALL STUART.

STUART'S JOURNEYS ACROSS AUSTRALIA.

1860—1862.

AUSTRALIA is rightly called the antipodes. It is the opposite extreme to Europe in more than its geographical position. It is a land of new beasts and new birds; a land where we find the mammalia laying eggs; where trees shed not leaves but bark; where the quadruped runs on two feet; where great rivers rise from the soil only to disappear into it; where the lake of last year is the plain of to-day; where the fiery wind, the wind that brings death and destruction, draws out of the north, and the cold winds sweep from the south; where this year we may have such rain that millions of animals are drowned by the floods, and next year such absolute absence of rain that as many millions perish of thirst; where many of the birds obtain their food from flowers and cannot fly; where railways are many and roads are few; where a slight frost in the early morning will be followed by a hundred degrees of heat by noon; where all the forest trees are singular and most are gloomy; where the cherry has its stone outside, and the nettle grows to fifty feet in height; and, lastly, where five great states have reached maturity in the short space of a century—and that in a country the greater part of which was unknown a generation ago.

The duty of making it known—of revealing the

truth which was wrapped in the mystery peculiar to all desert regions—fell upon pioneers who acquitted themselves as men. The names of Sturt, Eyre, Stuart, Gregory, Winnecke, Leichhardt, Burke, Wills, Giles, and Warburton, are of household fame in Australia; in the mother-country they are known to many who are ignorant of the magnitude or perils of their travels. And of these names, none is so famous and none so deserving of our admiration as that of John McDouall Stuart. He it was who, at the end of a long period of exploring activity, culminated a career of over twenty years by crossing this new continent from south to north—the first man to pass through its trackless wilds and emerge on the opposite coast; the first man to cross Australia from sea to sea; the first man who, coming direct from the waters of the southern ocean, bathed himself in the warm seas of the Indian ocean; the man whose track became the route of that telegraph line which connects Australia with the civilised world—above all, with the mother-country; and whose path will in all probability become that of the trans-continental railroad, even now in contemplation. The name of John McDouall Stuart is inseparable from the history of Australian development; inseparable from a description of its geographical formation and features; inseparable from its roll of distinguished men.

We might note, in passing, how full of persistent, persevering pluck he was. Like that later traveller who has twice crossed another continent, and on every occasion clung with bull-dog tenacity to the path he had first selected, Stuart knew no turning aside where progress was possible; no resting while strength remained; no surrender of his aims, even though he might be forced to retreat. Thus, in his fourth exploring journey—which was undertaken with a view to crossing the continent from south to north—its northern limit was imposed by the hostility of natives when he was only two hundred and fifty

miles from the Gulf of Carpentaria, and he was forced to return to Adelaide. In his fifth journey he reached a hundred miles further north than in his former journey, but impenetrable scrub, combined with failure of provisions, drove him back once more to Adelaide, at the moment when he could almost scent the spice-laden breezes blown from the Malay Archipelago; yet, with unfailing pluck, within a month of his return he set out on the long journey for the third time, and this time he was rewarded with success. He planted the British flag on the shores of the Indian Ocean, and then returned across the continent to Adelaide—to be welcomed by the city with a “triumph,” and to receive all those manifestations of admiration with which his fellow-citizens delighted to honour him.

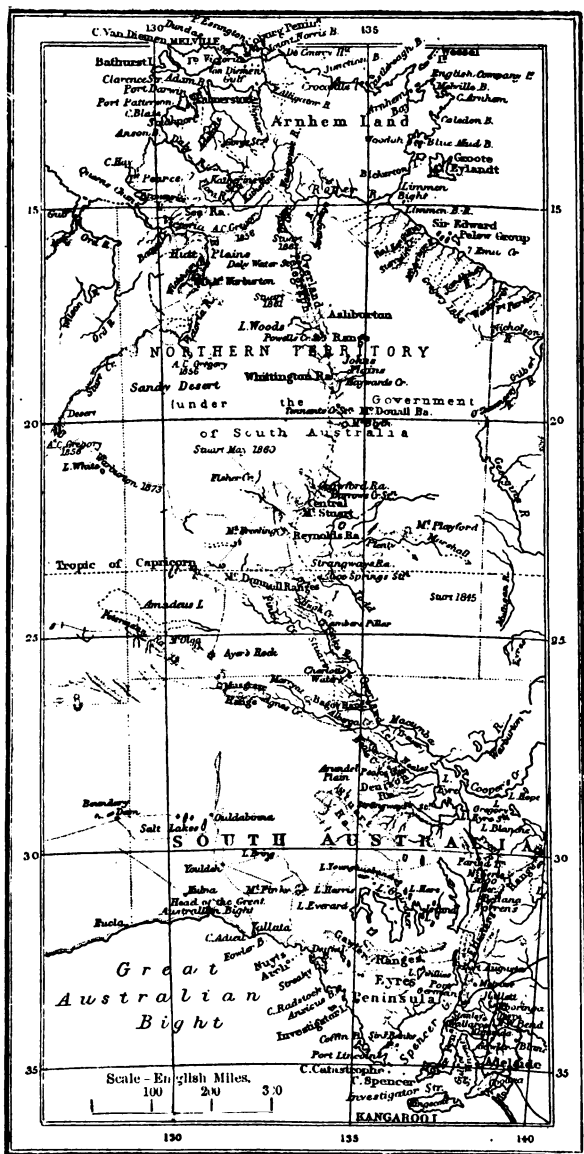
These three journeys of Stuart's, one in purpose and similar in character, may well be treated as a whole, and I propose in this chapter to give such an outline of his long marches across the interior of the “Island Continent,” as will connect them together, and, without unnecessary repetition, serve to show how, step by step, guided by observation and taught by experience, he at last attained the ultimate goal of his ambition.

A few words at this point on Stuart's former work may be helpful. His experience as an explorer began under Captain Sturt, whom he accompanied in 1844 as a draughtsman. On that occasion the expedition ascended the Murray, crossed thence to the Darling, and then turned north-west across “Sturt's Stony Desert,” finally arriving, after many perilous adventures, at a spot within a hundred and fifty miles of the centre of the continent. It was on this journey that they had their famous experience of what Australian heat and drought can be. Mr. William Hardman, who edited Stuart's “Journals,” says that “the heat of the sun was so intense that every screw in their boxes was drawn, and all horn handles and combs split into fine laminæ.

The lead dropped from their pencils, their finger nails became as brittle as glass, and their hair and the wool on their sheep ceased to grow. Scurvy attacked them all, and Mr. Poole, the second in command, died. In order to avoid the scorching rays of the sun they had excavated an underground chamber, to which they retired during the heat of the day."

It was this discovery of the great stony desert by Stuart that gave rise to the impression which so long remained, and, though cleared away a generation since by Stuart, still sticks in an extraordinary way in the memories and imaginations of people—the impression that the interior of Australia is one vast stony, sandy desert. That theory, which was first entertained on a very partial exploration, has been over and over again exploded as the explorers have brought new regions under their ken. It is true that the Australian interior is composed of plains and plateaux which boast no mighty river—no river of half the extent of many of the Congo's tributaries—but still there has been a regular succession of discoveries in Central Australia which points to the fact that these plateaux are by no means waterless; that in many seasons there is abundance of water in the river courses, not only for immediate purposes, but also for storage on a large scale; and that in no season, however dry, are certain large tracts in the interior without water. On the other hand, there are equally large tracts to cross which have been death to many a reckless pioneer; exploration, however, has defined their limits, and the Australians are therefore in a position to avail themselves of the undoubted possibilities of much of their vast interior.

We must now return to Stuart, and see what he was doing before he finally prepared to cross Australia. In 1858 he led—this was the first occasion on which he was leader, a post never afterwards to be relinquished—an exploring party from Mount Eyre, at the south of Lake Torrens, in a north-westerly direction to near



MAP SHOWING PORTION OF COUNTRY EXPLORED BY STUART.

By permission of Messrs. W. & A. K. Johnston.

the Stuart Range; and thence south-west to the shores of the Australian Bight, crossing, as he approached the coast, a wide tract of scrub and sand. His native attendant deserted him, and in company with one white companion, Forster, he made the coast at Denial Bay, and travelled thence eastward to Port Augusta. For a week previous to reaching the coast the travellers supported themselves on grass and thistles boiled in their own juice, so short was the supply of water.

The next expedition was to explore the neighbourhood of Lake Torrens; it was begun in April and concluded in July 1859. In the following November a third expedition in the same region was successfully carried out by the end of January 1860, and two months later Stuart started on his first great journey into the far interior. It should be stated here that two Australian gentlemen, Mr. Finke and Mr. Chambers, generously assisted, the former even initiating to some extent the various expeditions which were carried on throughout a long period by Stuart.

On March 2nd, 1860, Stuart left Chambers' Creek—a river he had discovered and named after Mr. Chambers in 1858—with two men and thirteen horses. He pitched camp the first night at Beresford Springs, where he met with the traces of a native fight. The corpse of a well-built native lay on the ground, the skull shattered in several places; the remains of an encampment were scattered round in considerable confusion, and the broken crockery and implements and weapons told, as plainly as signs could tell, that an outbreak of hostilities had occurred. In these, fortunately, he was not to be involved, for marching steadily north-west, the country of the belligerents was soon left behind. He was now travelling over the undulating sandy region between Lake Torrens and the country west of Lake Eyre, and there he found abundance of dry grass. During the next few days he was complaining much of the cold (the wind

being from the south), and finally heavy rain set in, not the least result of which was that the provisions got a thorough soaking. The rain had rapidly changed the character of the various creeks; their beds filling up, and the streams overspreading the wide sandy valleys. Marching became more difficult. In crossing a creek the saddle bags fell from one of the horses to the ground, and the sextant and other instruments which they contained were seriously injured by the water—a great misfortune so early in the journey. Two days later, while crossing the Peake river, many of the horses had a narrow escape of drowning, and one horse, owing to the rotten and swampy nature of the river-banks, got so firmly bogged that his owners were quite unable to extricate him. At last, on March 21st, fine weather set in. They set to work to dry their provisions, and found that much of the preserved meat was spoiled. On making a fresh start and marching northward, Stuart was struck with the change that had passed over the face of the country since the rain; green grass and vegetation shooting up with great rapidity. He then crossed a succession of creeks, the vegetation of which was largely composed of gum and myall trees, and after a while entered a thickly-grown country of mulga, but well grassed. Stuart had now reached the Neale river, which was too deep to ford, and at that time too swift to swim. After some search, however, a ford was found, and then a region was entered which was chiefly covered with mulga and salt bush, as well as, at this time, a good supply of grass. A little later the scrub became so thick that he could not see many yards before him, and here, too, he fell in with the spinifex, which indicated desert. The result of this short march through the scrub was the devotion of a whole day to the repairing of the bags and packs which had been rent and pierced by the thorny scrub. The work, however, was of but little use, for the country through which he was marching grew rapidly

worse—the moderately level scrub-land giving way to rolling sand-hills thickly grown with scrub. Here, too, on the edge of a creek, he again met with signs of natives; their camp-fires were still smouldering, and several huts, lately deserted, were to be seen. And near by there was a large native grave: a circular mound, built up of earth and sand, wood and stones, some four feet high and twenty feet in diameter. The country in the neighbourhood appeared to be fairly well watered, and Stuart concluded, taking into consideration the large grave, the winter huts, and the many tracks of natives which he here encountered, that the water in this district was permanent.

And here a short description of the bush, and the animal life which dwells in it, may well be given. The scrub of which we hear so much in all the journeys of Australian explorers is generally dense, and always dreary to look upon. The “mallee” scrub is, perhaps, the most common, and it has been said that there are no fewer than eight thousand square miles of it in South Australia alone. Regarded from a height, the country covered with “mallee” resembles a dark sea of rolling waves. The occasional tree, which juts up like some rocky spire, only serves to accentuate the dismal and unintermittent scrub. The “mallee” is a dwarfed variety of the eucalyptus; its stems grow like osiers, close and branchless, and reach a height of about fourteen feet. More difficult even than the mallee is the mulga, a scrub composed of acacias (of which there are more than three hundred varieties in Australia). These acacias are all armed with thorns of great strength, and the description Stuart gives of his experiences in the mulga shows what damage, even to strong leather and canvas, this scrub can do. Another sort of scrub, which is often called “heath-scrub,” seldom grows higher than two feet, but it is very dense and troublesome to negotiate. The spinifex grass, which is also commonly called “porcupine grass” from its long spikes, covers an

enormous area of Australia, and its presence may usually be taken to indicate sterility of soil. There is, however, some hope that, as the interior is gradually reclaimed, the spinifex will be found to have covered ground capable of sustaining cultivated fruits. Its terrible thorns and prickles are even more dreaded than the mallee or the mulga.

Such is the characteristic vegetation of the interior. Along the creeks, however, and the slopes of some of the mountain ridges, may be found the famous gum trees of Australia, which near the coast reach perfection. There are many varieties of the eucalyptus, several of them reaching three hundred feet in height. They are most plentiful in the fertile valleys, and on the hill slopes near the coast. Then, again, there is the shea-oak—a famous tree: from the colour of its timber, which resembles raw beef, it is often called “the beef-wood tree.” Its timber is very good, quite as good as English oak. A curious appearance is presented by the shea-oak, owing to its being leafless. Parasites, however, patronise its branches, and the long grey-green mosses trail and swing to and fro in mournful response to the sighing of the wind. Then there come the acacias, which are everywhere plentiful—either as huge forest trees or as mulga scrub. When in blossom they present a beautiful appearance, and the foliage of a large number of species gives out a delicious fragrance.

The general aspect of the vegetation near the coasts is sombre. There seems but one pervading hue, and the effect is naturally monotonous. The trees are evergreen, it is true, but that is in one sense not in their favour; for the rich colouring of autumn and the vivid and exquisite greens of spring are never seen in Australia. A dark, dull, olive-green hue spreads over leagues and leagues of forest; it is the colour of each of the countless leaves, thick and leathery, which hang vertically to the scorching sun—leaves which have no silvery under-side, as in England,

to make that flickering aspect of dark and light which, in point of colour, is perhaps the chief beauty of an English tree. Of the gum or eucalyptus family the commonest species are the blue gum, red gum, stringy bark, and iron bark; but in some parts of Australia we get a greater variety of vegetation. Near Sydney, for example, in the valley of the Illawarra, you look upon a landscape starred with palms, tree-ferns, and Indian figs. On the highest ridges of the ranges which so effectually intercept the water-laden breeze of the ocean as to leave much of the interior waterless, there blossoms a profusion of alpine plants; upon the slopes of these ranges, fern trees, lofty sassafras, and the famous "flame-tree" luxuriate:—

"For miles the Illawarra Range
Runs level with Pacific seas:
What glory when the morning breeze,
Upon its slopes doth shift and change
Deep pink and crimson hues, till all
The league-long distance seems a wall
Of swift uncurling flames of fire,
That wander not nor reach up higher."

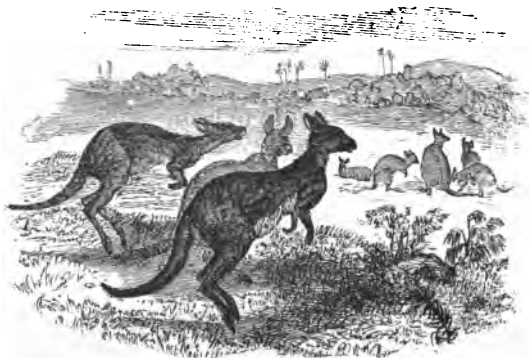
Perhaps the acacia, with its milk-white blooms, has proved the first favourite with that sturdy race which is now welding the scattered states of the Island Continent into a homogeneous whole. In the poetical literature of Australia, the acacia, known as "the wattle," is referred to over and over again, and always with affection. Adam Lindsey Gordon, who shares the Laureate's crown with Henry Kendall, writes (in "The Sick Stock-Rider") :—

"Let me slumber in the hollow,
Where the wattle blossoms wave,"

and Frances Tyrrell Gill has struck a note of deep pathos in the poem "Beneath the Wattle Boughs." Poem after poem in an Australian anthology would ring of the wattle blooms so dear to the heart of our antipodean brother.

But it must not be forgotten that a large portion of Australia is tropical; that its northernmost point is little more than ten degrees south of the equator. Remembering this, one ceases to be astonished when told that those brilliant parasitic and air-plants which characterise the torrid zone are found in the flora of Australia; that palms and bamboos, and other trees and grasses typical of the tropics, dominate the landscapes of northern Australia.

But both north and south, in the temperate part as much as in the tropical belts, are to be found its characteristic mammals—the most notable members of



WALLABIES.

the marsupial family. Of kangaroos there are some sixty species, the best known of which are the Great Kangaroo, the Antelope Kangaroo, the "Wallaby" or Brush Kangaroo, and the Yellow-legged Rock Kangaroo. Their appearance is so familiar that no detailed description is necessary. When moving across the open country in search of food, or when pursued, they travel with a rapidity almost incredible even by an actual observer. For the leaps are so deliberate, and the pauses between them so well-marked, that one might easily be led into supposing the pace to be slow. Each bound of the great kangaroo, when flying from the

hunter, may be averaged at fifteen to twenty feet. The fur of most of the kangaroos is grey, but that of the so-called red kangaroo is a most beautiful dove-colour, warmed as it were by a reflection of a red sunset. The gradations of tint are so exquisitely soft that even the white of the limbs is tinted and graduated, and thus differ from that of other species. The "wallaby" is a familiar name to all who are acquainted with Australian life and literature; it is much smaller than the great kangaroo, which sometimes measures six feet from nose to tail, and it is more common in Tasmania than Australia.

It is interesting to note that the tree kangaroos differ somewhat in their physique from their "cousins," the land kangaroos. They are more adapted to their habits—the fore-legs being nearly, and often quite, as much developed as the hind-legs. With other marsupials may be mentioned the opossums, phalangers, and the "wombat," a burrowing creature which is known to many settlers as a badger. The marsupials, it might be noted, rest by day and feed by night. The intrusion of man, however, somewhat interferes with the preservation of these regular habits, and kangaroos have long since become accustomed to many a flight for life across the grassy uplands, under the scorching rays of a vertical sun.

And one must not forget the platypus, or "duck-bill," and his cousin the hedgehog, both members of that curious family, the ornithorhynchi. The former is practically the water-mole of Australia; he riddles his home in the banks of the creeks, and lives on small mollusca and insects. The hairy body is that of the mole; the broad flat bill might belong to the duck; the female lays eggs like a hen; both sexes have teeth, and the male is armed on his hind feet with spurs. The echidna, or hedgehog, has neither bill nor teeth, but the male is spurred and in other respects resembles the platypus. For burrowing it probably has no rival.

Of birds the most remarkable is the lyre-bird, which is so exclusive that there are but two known varieties. The tail feathers, from the shape of which its name is gained, have become "articles of commerce," and, as a consequence, are ruthlessly plucked by greedy spoilers. The slaughter of the lyre-bird has been so indiscriminate that it has become rare; and the tail feathers often fetch, in Sydney

and Melbourne, as much as thirty shillings a pair.

The grass-parrakeets of Australia are numerous and parti-coloured. The bower-birds are most interesting, the ingenuity with which they weave, on a platform of twigs, a bower constructed of the same materials is astonishing; and the constant delight and pride they appear to take in embellishing their bowers is not less remarkable — shells, bones, feathers, even flowers and fruits being called into requisition by these rather soberly

clad little builders. Then there is the laughing kingfisher, which, curiously enough, neither lives on the banks of rivers nor feeds on fish, but dwells in the dry scrub and dines on mouse; his laugh is loud, and recurs at such regular intervals that he has been called the "settler's clock." And the emeu deserves more than a word; for he represents in Australia the ostrich of Africa and the rhea of South America—the great *cursores* of



THE LYRE-BIRD.

this division of the animal world. Like the rhea, he has three toes—in this being unlike the ostrich, which has only two. Unlike the ostrich, also, is his plumage; for in place of the beautiful plumes are stiff, almost featherless quills, and the general effect is rather that of hair than of plumage. Shorter, thicker, and less elegant than the ostrich, it has also a less attractive action, for as it walks along, the head, neck and body stoop and bow with remarkable unanimity, in a very humble though mincing manner.

But of all birds the bell-bird, or “moko-moko,” as the natives call it, is the one that delights the Australian. In a land where the birds are songless, its clear notes are necessarily conspicuous and strangely familiar. Its “short, but oft-repeated song” salutes the morning sun with a solitary chime; throughout the day it rings the hours. Our own poet, William Sharp, who during a sojourn in Australia wrote some descriptive pieces unsurpassed for their photographic fidelity, has sung of the bell-bird:—

“Hush, how it swells and swells
Still sweet and low and sad—as tho’ the peal
Were chimed in forest-depths where never steal
Sounds from the world beyond, and where no noise
Breaks ever the long dream. It is the voice
Of the mysterious bird whose bell-like note
Chimes thro’ the Austral noon as church bells float
O’er lonely slopes and pastures far at home.”

And again, in his “Australian Transcripts,” he writes:—

“The stillness of the Austral noon
Is broken by no single sound—
No lizards even on the ground
Rustle amongst dry leaves—no tune
The lyre-bird sings—yet hush! I hear
A soft bell tolling, silvery clear!
Low, soft aerial chimes, unknown
Save ’mid those silences alone.”

Henry Kendall, the Australian, was a close student of nature in her many moods, preferring, however, to

commune with her in the forest, deep hidden in the fern. Naturally, perhaps, he turned from the parched upland and stony plain to the rich vegetation of the valley and hill-slope. And he has left behind him a poem descriptive of the part which the bell-birds play in the economy of nature throughout the various seasons. One verse—that which sings of the bell-birds in the month of December, a “fiery” month in the antipodes, must suffice:—

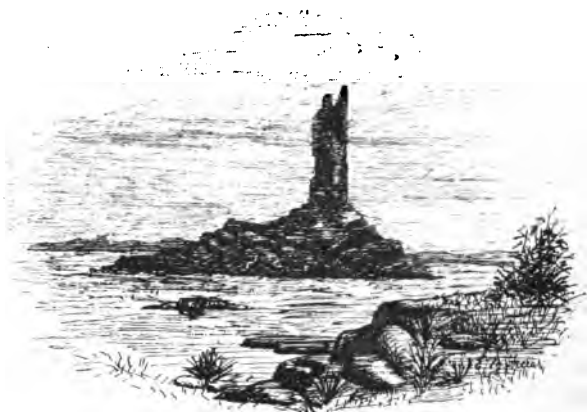
“Welcome as waters unvisited by the summers
Are the voices of bell-birds to thirsty far-comers,
When fiery December sets foot in the forest,
And the need of the wayfarer presses the sorest.
Pent in the ridges for ever and ever,
The bell-birds direct him to spring and to river,
With ring and with ripple, like runnels whose torrents
Are toned by the pebbles and leaves in the currents.”

Clearly, then, the bell-bird deserves the affection he has received from lovers of Australian nature.

And now to return to Stuart. On April 1st one meets with the following entry in his journal—a suggestive result of travelling in Central Australia:—
“I find to-day that my right eye, from the long continuation of bad eyes, is now become useless to me for taking observations. I now see two suns instead of one, which has led me into an error of a few miles. I trust to goodness my other eye will not become the same; as long as it remains good, I can do.”

Stuart now journeyed across a country which offered a surprising series of alternating aspects. One day it would be scrub without any sign of water; the next, open grassy country, with running streams. On April 3rd he ascended and named Mt. Beddome, and on the 4th he discovered the river which he called the Finke, and which is so often referred to in the annals of Australian discovery. The Finke varies in size, of course, with the seasons; but it always contains running water and the country in its immediate

vicinity is of exceptionally rich character. The gum trees which grow in profusion on either hand attain large proportions, and on the north side of it there stretches a rich plain, carpeted with green succulent grass, a rare feature in this part of the great Australian continent. On April 6th he arrived at that remarkable monument of an ancient mountain mass—Chambers' Pillar. A march through rolling sandhills, which always make heavy going, and are doubly difficult to traverse when covered, as they so fre-



CHAMBERS' PILLAR.

quently are, with the sharp, prickly spinifex, brought him to the base of the Pillar. An obelisk of sandstone, carved and hieroglyphed by weather and water, rises perpendicularly for about one hundred and fifty feet from a sandhill more than a hundred feet in height. This isolated and lofty rock is a striking testimony to the past history of the country. There can be no doubt that it is one of the last remnants of the elevated table-land which at one time occupied the whole of this portion of Central Australia, and which the agencies of atmosphere and water, both chemical and

mechanical, have worn and washed away. In this work the wind has borne a notable share. From time unknown and incalculable by the methods of chronology, the wind has swept from the centre of that continent southward to the sea. In its path it has encountered numerous obstacles, and these it has carried away—so gradually as to make the process almost imperceptible—and deposited elsewhere. It has removed the upper surfaces of the sandstone hills and plateaux, and it has sawn and fretted away at their escarpments and bases until the soft rock has been worn through, and only the hard “primary” rocks remained. This work has been going on through vast geological ages, and the agents which did the work have varied from time to time. In the most remote period the sea was lapping against the sides and shoulders of the higher ranges, and depositing in its bed the material it washed away. Thus the hollow in which it lay was gradually filled up. Then came the elevation of this basin, and with it the high salt plateaux which are its most characteristic features. Where the sea had flowed over the land there now only remained salt lakes and lagoons, brackish streams, and dry sandy stretches of land. Then the rain fell and carved its way down through the porous rock until fresh water springs gushed from the earth, and gave birth to rivers, which in their turn bored their beds deeper and ever deeper, cutting deep gullies through the table-lands, and washing around mountain masses till only great hard granite bosses remained. With the rain, also, worked the wind and thus it is that at the present day we find these tent-hills and table-mountains, these granitic blocks of high ground standing in a vast sandy basin.

Perhaps the most characteristic monument of this prehistoric time is the lofty, precipitous rock which Stuart discovered in April 1860, though it should be added that it is but one of a large class of such monuments since discovered.

I might here mention another agency which Mr. H. P. Woodward, the present government geologist of Western Australia, believes to have had far more influence on the minor changes of Australian scenery than many people would, at first sight, be inclined to suppose. He thinks that a great deal of work is done, vastly altering the appearance of the country, by what may appear to many people at first sight a perfectly ridiculous agency—viz., the white ants; but after passing over the plains, or through the thickets, where their hills are so numerous that it is difficult to drive amongst them, the immense amount of their work can be better appreciated. The clay, cemented with resinous matter, with which they build their nests, is as hard as brick; and when these fall to pieces they form clay flats almost impervious to water, and so hard that they will bear a great deal of traffic without being cut up. The work of these insects can be studied in all stages: first, in the thickets where they are commencing work; then in the more open country, where they have got the upper hand of the timber; next on the plains, where half the hills will be found deserted; and lastly, on the clay flats, where they have almost entirely disappeared, and the scrub has begun to grow again. Another remarkable thing about these nests is the amount of iron they contain, for when a tree has been burnt in which ants have built a nest, there will be found at its base a mass of iron clinker, looking just as if it had come out of a furnace. Mr. Woodward, in fact, claims for the ants of Australia the work on a large scale which, on a small scale, Darwin claimed for worms, where the conditions of soil are favourable to the existence of these humble creatures.

Still marching northward, across low sand hills densely covered with spinifex, or long plains well grassed, he passed the Hugh Creek, and arrived at the James Range of mountains—which really form the southern barrier of the great central boss of mountains

he was now about to discover. He ascended the summit of the James mountains, and thence obtained a view of the still higher range to the north, and of the intermediate country, traversed as it was from west to east by lower hills. The higher range he made on April 12th, and he says in his journal: "This is the only real range that I have met with since leaving the Flinders Range." He named it the McDonnell range, after the then governor of South Australia.

The McDonnell Range consists of long parallel ridges, which alternate with rocky and undulating plains equally long and parallel. It is the most considerable mountain mass in the interior of the continent. It is a curious fact that the quartzite, and other rocks which capped and buttressed this range, have in the course of ages been washed away, and that those rocks which are richest in minerals—the very rocks which man is ever seeking—should be left exposed. Gold and rubies lie near the surface, and quite recently diamonds have also been discovered. I might add that the Australian ruby is not identical with that which has been so well-known for so many ages, but is a new kind. Brilliant as a ruby when cut, and harder to cut than a garnet, it may be considered a great improvement upon the latter, and nearly equal to the former gem.

At last, on April 22nd, 1860, Mr. Stuart reached a gum creek, about two miles south of the mountain he named after himself, and found by his observations of the sun that he had really arrived at the centre of the continent. He accordingly marked a tree and hoisted the Union Jack. On the top of Mount Stuart, a little later, he raised a stone pile and again hoisted the British flag. The view from the mountain was not encouraging; to the north lay a wide plain of spinifex, gum and mulga—though, it should be added, traversed by watercourses; to the east, broken ridges, and the same to the west.

Nevertheless, he determined to keep on. His ex-

periences during the next six weeks were painful. Spinifex, coarse scrub, and endless reaches of sandy plain were bad; worse, however, was the great scarcity of water. On more than one occasion the horses had to go for over a hundred hours without water, and to some extent the travellers shared in their privation. Added to this, scurvy attacked Stuart, and he passed days and nights of acute pain. This is the sort of entry that he made at this time: "For fourteen miles our course was through mulga scrub and spinifex, in some places very thick. At twenty-seven miles camped without water. The country that we have passed over the last two days is apparently destitute of water even in rainy weather. I do not think the ground would retain it a single day."

And much the same entry we find him making throughout the month of May, during which he was travelling northward. Two of his horses went mad, and, one day, his own horse suddenly rushed off into the dense scrub. Stuart was torn from the saddle, and dragged for a short distance, the horse kicking at him all the time. So near was he to being killed on this occasion, that the horse, in one of its frantic kicks, knocked his hat clean off and grazed his forehead in the act! This sort of experience was not calculated to improve the scurvy. By this time, indeed, he was a mass of sores, and his mouth and gums so sore that he could only swallow boiled flour and water. His hands were so festered as to be almost useless. Later on, we find him saying that his muscles are showing black through his skin, and that the act of swallowing has become nearly impossible. Soon after this he was obliged to rest a few days, being too ill to be moved. However, a change for the better occurred, and he had advanced on June 2nd as far north as Bonney Creek, a fine, broad stream while it lasted, and containing fish "four or five inches in length." A few miles further on he crossed a range of hills, which he named after Sir Roderick Murchison—then President of the Royal

Geographical Society—and about twenty miles distant, yet another range, which he called the McDouall Range. All the way along, in fact, he was busy christening his new discoveries. There are few men who have had so many names to confer in one journey, for the reason, perhaps, that there are few countries where natives, and consequently native names, do not abound; and travellers, as a rule, have sufficiently good taste to refrain from altering a fair native name for the sake of giving the chance of a mortal immortality to some distinguished or friendly individual at home. The gentleman who changed the name of Lake Tolapelola to that of Lake Sarah Jane is, of course, an exception.

At Kekwick Ponds (named after the senior of his two fellow-travellers), Stuart had one of those curious experiences which have happened to travellers in most quarters of the globe, but which at the same time still remain more or less a mystery. Here he was visited by some natives—tall, powerful, and well-made, good-looking and talkative in their own lingo. Their head dress consisted of a cap, fitting closely round the head, and rising from the forehead up to a peak some four inches high. The outside was composed of network, and the inside of feathers so tightly bound together with cord that they were as hard as if they had been wood. After having tried by signs to ascertain where water might be found, and having as signally failed, Stuart was about to give the matter up as a bad job, when the oldest of the natives gave him one of the Masonic signs. Stuart stared at him; the old fellow repeated it, and his companions joined with him in making it. Stuart then gave the proper Masonic reply, and the natives were delighted. They patted his shoulders and stroked his beard, and they looked very pleased; but unfortunately conversation flagged as before, and no information could be obtained from them. It is not a little curious that here, in the heart of an inhospitable region, among natives who

probably had never looked upon the face of the white man, the signs of a secret society should form the elements of a common language between the bushman and the civilised intruder. We see that the common knowledge established a sort of *entente cordiale* between the two, and in other cases we know that this community of knowledge has been instrumental in advancing the explorer's aims in a marked degree. The conclusion, therefore, that one is tempted to draw is, that any traveller in wild lands, or any habitual wayfarer on the high seas, is well-advised in being a Mason. The same conclusion applies to the knowledge of the more common words and idioms of Romany: all the world over, savages may be found more or less acquainted with this language of a world-wide wandering race, and many a traveller in distress has found a little knowledge of this interesting language not only no dangerous thing, but a potent factor for good in his dealings with untutored man.

But we have now to pass on to the point where, in this his first attempt to cross Australia, Stuart was turned back. On June 26th, he set out from his camp at Hayward's Creek (about 19° S. lat.) in search of water, passing on his way, though at some distance, a native camp. On returning towards night, when slowly pushing their way through some dense scrub, the small exploring party—three in all—were alarmed at seeing several natives, fully armed with spears, waddies and boomerangs, leap up from the scrub where they had lain concealed, and advance toward them with evident hostility. Stuart turned and tried to make friendly advances to them, but they only responded by whirling their boomerangs round their heads, and executing some unmistakable figures of their war-dance. Their numbers, too, rapidly increased, and from every bush there seemed to spring a man, armed to the teeth and on their destruction bent. Stuart and his companions ranged themselves in front of their baggage horses and made ready to

resist the approaching attack. Suddenly an old man advanced from the ranks of the natives and signed to them with his boomerang—signs, indeed, which Stuart interpreted to mean a request to withdraw with all despatch; accordingly, he prepared—nothing loth—to comply, but the moment they started to retreat a perfect rain-storm of boomerangs broke from the ranks of the excited natives and fell about the little band. Setting fire to the grass on all sides, wherewith to fight the better and take surer aim at their intruders, the natives formed up in double column and open order, and charged. Whizzed the boomerangs through the scrub, whistled the waddies and spears in the ears of the retreating whites! Matters had evidently reached a crisis, and any further attempt at parleying was impossible. So Stuart gave the order to fire, and straight and true fired these adventurers three. In a few moments the natives were impressed, and stayed in their advance to count the dead and wounded. The pack-horses, on the other hand, terrified by the firing and the shouting, bolted for the camp. Then the natives—tall, desperate looking fellows—returned to the charge, and despatched another shower of missiles against their enemy. A steady reply from three guns again sobered them, and although they followed up the retreating party for many miles, they took good care to keep just out of range. On every side fires were springing up, and across the still night air the war cries and yells of the discomfited savages rang loud and clear, and Stuart, fearing a sudden attack at any moment, beat a rapid retreat to Hayward's Creek. When morning broke the signal fires were burning all around them, and Stuart felt that his position did indeed require consideration.

That the natives were bold and determinedly hostile, was evident; that any attempt to force a way through their country would be fraught with the gravest risk was also abundantly clear; that the health of the exploring party, and the sorry condition of their horses,

were totally inadequate to any long and forced marches was a fact which they knew only too well; and, finally, that their rations were well-nigh run out—even though only calculated on half-ration scale—was a fact also well known to them. Everything considered, therefore, Stuart came to the conclusion that his only course was to retreat by the way he had come; then to get rest and renew his strength; and, having added to the number of his party, to set out again and, with the help of the experience gained in this nearly successful journey, cross the continent from sea to sea. In matter of fact he was, when turned back by the determined front of the hostile natives, only about two hundred and fifty miles from the Gulf of Carpentaria; only two hundred and fifty miles away from the completion of a journey which no white man had as yet performed.

Retreat, accordingly, they did, and although at times they passed through well grassed and moderately watered country, the greater part of the return march was rendered even more difficult than their previous advance, owing to the absence of rain and the consequent shrinkage of the creeks. One after the other they all fell ill, and towards the end Kekwick came near to death. In his journal during this retreat Stuart says:—"My men have now lost all their former energy and activity, and move about as if they were a hundred years old; it is sad to see them."

At last, on August 26th, they reached Hamilton Springs, where they received a warm welcome from a settler then encamped there; and after a rest proceeded to Chambers' Creek and thence to Adelaide, reaching the latter place in October.

The story of the expedition, its near approach to a success which was only prevented by the absurdly small number of explorers and their insufficient equipment, created great enthusiasm throughout the colony, and enlisted many friends in the cause of Australian exploration. The parliament of South Australia voted

£2500 for the equipment of "a larger, better armed, and more perfectly organised party," whose leader was to be Stuart. He, in his anxiety to re-tread his path through the interior, made his preparations with such rapidity that the second expedition was fitted out in little over a month, and had started on its way by November 29th. As we have seen, Stuart was leader; Kekwick, who had served him so well in the first expedition, was appointed second in command; Thring was third officer, and there were nine other men, of whom one was a farrier, and another a saddler. The services of the former would be much required in passing over the long stretches of rolling or ridged sand plains, thickly strewn with stones of all shapes and sizes; and the latter when they had to push their way through the thick scrub, which tore the pack-saddles and harness well-nigh into ribbons.

On January 1st, 1861, the expedition left Chambers' Creek. It consisted of twelve men and forty-nine horses. Thirty weeks' provisions were taken—among which was a large quantity of dried bullock's meat. Several of the horses, however, had already shown signs of weakness, the horses from Adelaide especially, and consequently Stuart was compelled to send some back almost as soon as he had started, together with two men. On January 11th, the dog of the expedition, with the familiar name of Toby, died from the heat; although for some days it had been carried on a pack-horse. This may serve to give an idea of Australian travel in midsummer (which of course January is), as Stanley's dog "Bull" made splendid marches in his master's great journey across Africa, and even as I write Mrs. French Sheldon arrives from Central Africa, much changed and travel-worn, but her collie "Jack" as sprightly as ever. The Stevenson Creek was reached by February 1st, and shortly afterwards they passed one of those "water-holes" which are so familiar to all students of Australian

exploration. And if I quote the few words in which Stuart's editor describes this particular "hole," it may help the general reader to understand what a water-hole may be: "This water-hole was one hundred and fifty yards long, thirty wide, and from eight to fifteen feet deep in the deepest parts. The native cucumber was growing upon its banks, and the feed was abundant. . . . Immense number of brown pigeons. There were thousands of them; in fact they flew by in such dense masses that, on two occasions, Woodford killed thirteen with a single shot. The travellers pronounced them first-rate eating." But water was soon to become scarce. On reaching the Finke, a considerable stream at some seasons of the year, its bed was found to be quite dry. The white drifted sand glittered cruelly in the fierce sunlight—almost, mirage-like, promising water—but water was there none. They sank a hole ten feet deep—the sand was only a little moister! After sinking various holes without success they marched on, and were fortunate enough to come across some native wells.

It was at this time, when following the course of the Finke, that Stuart discovered a curious piece of native art. On the bark of two trees he found, rudely cut, two heart-shaped shields. The shields were divided down the centre by a perpendicular bar, and broad arrows were ranged in rows on either side of it. Round the outside numerous arrows were drawn, together with other symbols of native warfare. Stuart, who, by the way, was sometimes apt to pass over certain points of interest, was struck by this, the first attempt at carving, or drawing, on the part of the bushmen which he had seen, and he had a copy of it carefully taken.

On March 19th, they reached the McDonnell Range, and here we have an interesting note: "After entering the McDonnell Range the water is permanent. It has been here for twelve months; no rain has

fallen during that time, for my former tracks, both up and down, are as distinct as if they had been made a month ago." On the following day, however, heavy rain fell, and about three hours afterwards the creek on which they were encamped "came down." By sunrise, says Stuart, "it was running at the rate of five miles an hour—a new and delightful sight to behold." The rain continued, and they remained in camp below "Brinkley Bluff"—a fine precipitous escarpment—for several days.

A few days later, when at the base of Reynolds' Range, the party passed a newly-built worley (hut), built with more care than any they had observed before. Instead of being open at the sides, or merely screened by twigs, it was thatched with grass from top to bottom. Inside, too, a regular bed was made up, also of grass; and at the entrance of the hut a large quantity of firewood was heaped. But, as usual, the inhabitant of this worley was not to be seen or found. The natives, so far, had kept well out of the way.

On April 24th, Stuart reached his "furthest point" of the previous year, but although fires and other traces of the natives were visible, no native appeared. Along both "Attack Creek" and "Hayward's Creek" the bush grass was growing strong—indeed, it was five and six feet high in some spots. This grass, it should be noted, was sometimes found when the water had entirely subsided; and it afforded a great contrast to the rough rocky ranges, covered with loose stones and prickly spinifex, which they were continually crossing.

Still steering northward, and discovering and naming in succession creeks, plains and mountains, on May 4th Stuart arrived at the range of hills running north and south, which he named the Ashburton Range, after Lord Ashburton, a President of the Royal Society, and from the summit of which he beheld the wide plain which he called the Sturt

Plains, "after the venerable father of Australian exploration," and, it will be remembered, Stuart's chief in his first journey from the Murray to the Stony Desert.

The Sturt Plains are a distinct feature in the geography of North-Central Australia. Taking the Ashburton Range as its north and south axis, or its "great divide," we may roughly describe it as, from south to north-west, well and sometimes densely wooded: thence to the north open treeless plain. On the east it forms a wide open plain, richly grassed. Portions of the plain are occasionally inundated, and as this washes out deep holes and steep-sided hollows, and leaves rotten cavernous ground, it makes it awkward marching at night. On the west side are the remains of a lake; the banks are steep, but the actual depth of the water must have been only about twelve feet. These shallow lakes are still a feature of Central Australia, but they may be said to be undergoing a gradual process of desiccation—as is the case, for example, in sub-tropical and tropical South Africa. Dwarf eucalyptus grows abundantly on Sturt Plains, although, with one or two exceptions, surface water is not to be seen. The plains are covered with shells, which, found amidst rich grass, have a curious appearance.

One notable exception to the general want of water on the Sturt Plains exists in Newcastle Water, which Stuart discovered on May 23rd. It is about nine miles in length, wide towards the east and diminishing to a creek at its west end. When Stuart sounded it in mid-stream he found seventeen feet. Mussels and other shell fish abound in its waters; pelican, duck, white crane, the sacred ibis and turkeys frequent it; and the neighbouring plain is here well grassed, and at times thickly wooded with gum-trees. Fish, too, were found in this water, and one of the party caught some which resembled whiting, and made really excellent eating.

While still on the plains one of the party found, propped in a tree, a miniature canoe—about thirty inches in length, twelve inches deep, and ten wide, sharp-prowed, flat-bottomed, and decked all over. On being opened it was found to contain the skull and skeleton of a young child. The sides of the canoe were carved, and the model was made with great skill. A curious discovery on a wide plain!

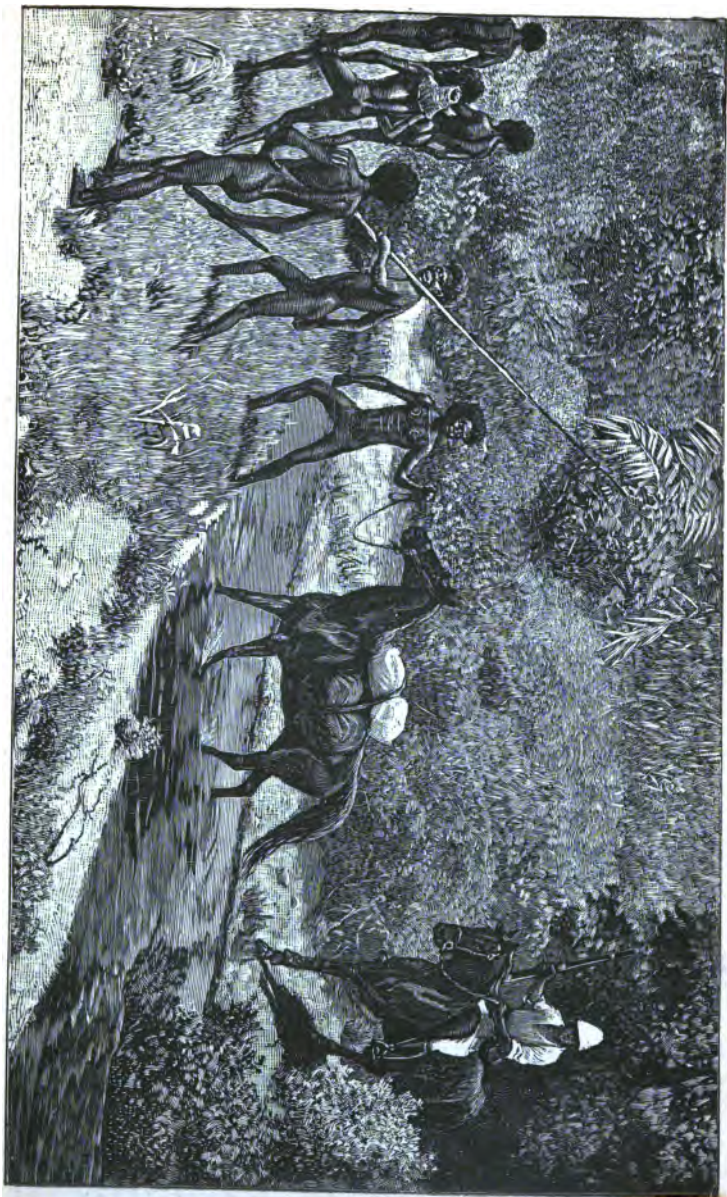
A succession of stony ridges, capped with the eucalyptus, broad-leaved mallee and spinifex, succeeded to the Sturt Plains, and water became a great rarity. The scrub was at times so dense that the horses could hardly be made to face it. A horse and his rider were invisible at a distance of five yards! The very saddles were torn off the backs of the animals as they plunged through the first few yards. At last, the scrub became so continuous, and remained so dense, that it was a complete barrier to any further progress. Several days were spent in trying to find or force a way through this scrub and forest, but all to no purpose, and failure seemed to be inevitable. By this route they would be unable to reach the Indian Ocean—at least, unless they had provisions sufficient to support the expedition while several weeks were spent in finding or making a path through the bush. The water difficulty was as great. Without water it would be impossible to proceed. Water might be found by sinking wells, but this would take so much time that the provisions would not hold out. The want of water and the diminishing stock of provisions, therefore, made the scrub even more formidable than it was, and in face of these obstacles Stuart had no choice but to retreat by the way he had come, and where he knew the water creeks and wells, the hollows of lush grass, and the places of abundant “feed.” After a variety of adventures and many privations, while attempting to make fresh discoveries on either side of their known route, the whole expedition returned once more to settled country, arriving at

Chambers' Creek on September 7th. Upon this occasion Stuart had approached to within about one hundred and fifty miles of his goal—the Indian Ocean.

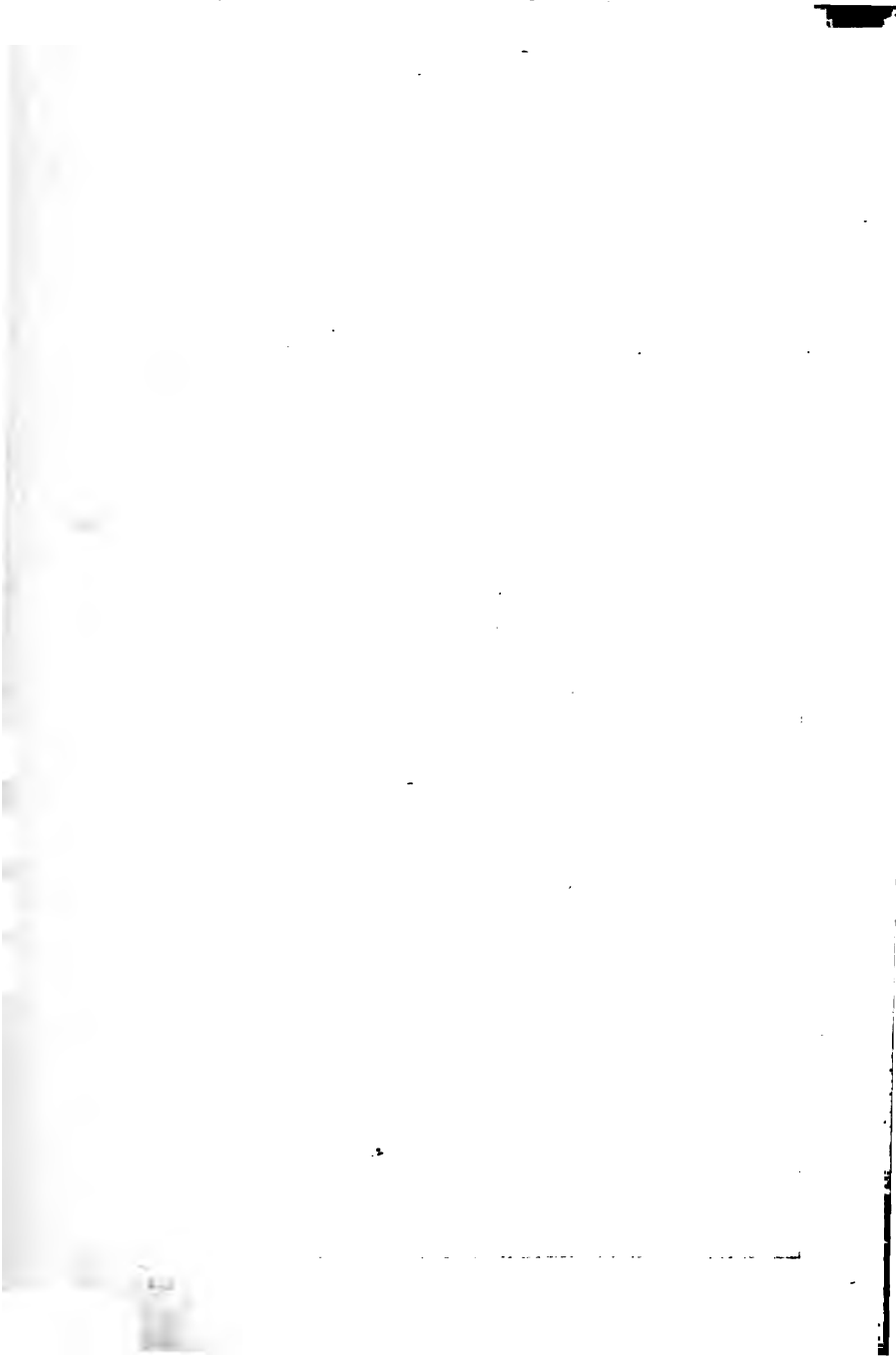
On his return to Adelaide he heard of the fate which had befallen the expedition sent by the Victorian Government, under Messrs. Burke and Wills. Nothing daunted, however, either by their fatalities or by his own repeated failure, he expressed himself perfectly ready to start again. The South Australian Government were no less willing to accept his services, and twenty-nine days after entering Adelaide the new expedition left for Chambers' Creek, the usual point of final departure for the interior. At this juncture Stuart met with an accident, which seemed, at first, likely to put an end to his career as an active explorer. A rearing horse struck him on the head and knocked him senseless to the ground; springing forward, the frightened animal trampled on Stuart's right hand, dislocating several joints and severely injuring it in other ways. Though he escaped amputation Stuart was made severely ill by this accident, and was kept at Adelaide for five weeks before he could start.

As in the last expedition, the officer second in command was William Kekwick, who had done such excellent service both in that and the first attempt to cross the continent, and Frederick Thring was the third officer. To these were added F. G. Waterhouse, as naturalist to the expedition, and W. P. Auld as assistant. A shoeing-smith and four other men made up the complement.

From the very first the excessive heat told upon the party: the horses soon knocked up, and in consequence large quantities of provisions had to be sacrificed in order to lighten their loads. The natives, too, were more troublesome than they had been on the previous expeditions. But by April 14th the expedition had recovered all its old ground,



CROSSING A CREEK.



and arrived safely at the north end of Newcastle Water.

For the next month Stuart was endeavouring to find a way through the dense forest and thorny scrub which environed them on the north. We find him undertaking long journeys into this almost impenetrable barrier, and returning dead-beat, and not infrequently with the loss of a horse. We meet with such entries in his journal as these:—"I ascended a low stony rise, from which I could see nothing but a thick forest of tall mulga and gums. I have skirted the border of the forest land in the hope of finding water, but am disappointed. I have not seen a drop. A thick forest and scrub almost impassable."

On April 26th, we find this note:—"In the forest the heat was almost suffocating." On the 27th: "There has not fallen a drop of rain since the 9th of March." On the 28th, "a dense forest and scrub . . . thicker than any which I had ever encountered before." On the 29th, "dense forest . . . no water." On the 30th we find; not unnaturally, this entry: "I feel so unwell to-day that I am unable to go out." On May 2nd, "a dense forest and scrub." But although disappointed at the open country, he discovered a chain of good water-holes, which he named "King's Ponds" after one of the party, and in acknowledgment of his services. On the 3rd, "thick forest and scrub" is entered in his journal; on the 4th, "dense forest"—and so the entries run.

All the while Stuart had been working round from west to north. It had been his intention to make the Victoria River, which, rising in Hooker Creek, flows north and then north-west into the Indian Ocean. The course of this river had been made known by A. C. Gregory, in his expedition of 1856, and his labours had been acknowledged by the Founder's Gold Medal of the Royal Geographical Society in the following year. Stuart now saw that the forest was so dense and so continuous, and the water supply so deficient,

that it would be impossible for him to force his way westward to the Victoria; he accordingly determined to push north by way of King's Ponds, and strike the course of the Roper, a river of considerable size flowing nearly due east into the Lemmen Bight of the Gulf of Carpentaria. On the 15th of May, accordingly, they started. To their peril by thirst in this waterless wilderness was now added peril by fire; for the natives, though seldom seen, were evidently mustered in force in the surrounding scrub, and continually set fire to the open spaces between the forest, and thereby endangered their lives. Stuart says, in a note about this time, that he "found the plain burnt for ten miles. The fire has been so great that it has burned every blade of grass, and scorched all the trees to their very tops. I was very fortunate the other day in having escaped it; nothing could have lived in such a fire, and had we been caught in it we must have perished." On May 17th the party struck King's Ponds again, and a few days later, marching a northerly course, reached a fine creek, shadowed at first by gum trees but gradually getting wider, and which was forthwith named, after the governor, "Daly Waters." Here, too, they struck the open country; and here, too, they met with a sight rare indeed to them—a swamp! The country, on the whole, was improving greatly. Pelicans and water-birds haunted it, always a favourable sign in a desert land; dry swamps, covered with succulent bluegrass, were met with; the plain was richly grassed; the bean tree with its bright crimson blossoms lit up the darker vegetation of the gum trees; and in Daly Water there was safety. Northward, too, ran a stream which, though at that season in parts was dry, here and there gave good water, deep and clear. The banks, however, were so rough and stony that it was difficult to lead the horses down to the stream; and the sandy soil, covered with spinifex, which characterised the neighbourhood of the creek, made travelling slow and unpleasant. But gradually the river-banks

drew further apart, and one of the well-known features of Australian rivers in West Queensland and other parts was met with. Running parallel with the main channel were subordinate creeks, which frequently retained water when the main course was dry. These channels again and again opened into lagoons, and then contracted once more into channels. The Diamantina, the Herbert, and the Barcoo are notable instances of this feature.

Passing the wooded tent-hill which Stuart named Mount Müller after the government botanist of Victoria, he struck the Roper river on June 21st, at a large sheet or basin of clear, deep water. This soon contracted into a series of parallel creeks or channels, and in order to cross the river he had to retrace his steps to the camp of the night before. On the 27th he again struck the Roper, and we find the following note in his journal: "Followed it (the Roper) up, coming nearly from the west, but winding about very much, and having many branches, which makes it very difficult for me to get the turn correctly. It is a splendid river; we have passed many brooks and deep reaches of water some miles in length, and the country could not be better; it is really magnificent. . . . This is certainly the finest country I have seen in Australia. We passed three rocky hills yesterday, not high, but having grass up to their tops, round which the river winds at their base, forming large and long reaches of water. On the grassy plains it forms into different channels, and is thickly timbered with shea-oak, gum, cabbage trees, and other trees and shrubs. . . . To the south are a few hills scattered over the grassy plains, with lines of dark green trees between them, showing that they are creeks flowing into the river."

On July 9th, having left the river behind, the explorers came across some large springs of good water, which were named the "Kekwick Springs," after the second officer of the expedition. It was here that the

scenery first became really tropical—fan-palms and the like forming features in the landscape. The following day they crossed a wide table-land, from the edge of which they were to behold the beginning of the valley which was to take them to the salt water of the ocean.

"The view," wrote Stuart, "was beautiful. Standing on the edge of a precipice we could see underneath, lower down, a deep creek, thickly wooded, running on our course; then the picturesque precipitous gorge on the table-land, then the gorge in the distance; to the north-west were ranges of hills. The grass on the table-land is coarse, mixed with a little spinifex; about half of it had been burnt by the natives some time ago. We had to search for a place to descend, and had great difficulty in doing so, but at last accomplished it without accident. The valley near the creek, which is a running stream, is very thickly wooded with tall stringy-bark, gums, and other kinds of palm trees, which are very beautiful, the stems growing upwards of fifty feet high, the leaves from eight to ten feet in length, with a number of long smaller ones growing from each side, resembling an immense feather; a great number of these shooting out from the top of the high stems, and falling gracefully over, has a very pretty, light, and elegant appearance. Followed the creek for about two miles down this gorge, and camped on an open piece of ground. The top course of the table-land is a layer of magnetic ironstone, which attracted my compass upwards of 20° ; underneath is a layer of red sandstone, and below that is an immense mass of white sandstone, which is very soft, and crumbling away with the action of the atmosphere. In the valley is growing an immense crop of grass, upwards of four feet high—the cabbage palm is still in the creek. We have seen a number of new shrubs and flowers. The course of the table-land is north-north-west, and south-south-east. The cliffs, from the camp



IN NORTHERN AUSTRALIA.



in the valley, seem to be from two hundred and fifty to three hundred feet high. Beyond all doubt we are now on the Adelaide river."

With tropical luxuriance Stuart also met tropical inconvenience, and the mosquitoes began to play a very important part during the night hours. We find entries relating how no one could sleep—and we need not be surprised, for they were in the habit of camping on the banks of creeks, amid bamboos, palm-trees, and thick vegetation of tropical growth. They were also passing over fairly wide tracts of marsh, and the ground near the water-courses was generally soft and boggy. Flocks of geese, ibis, duck, crane, and other birds more or less aquatic, were continually rising in alarm, and flying away before the intruders. The land, indeed, was no longer a desert, nor even partially desert; water was there in plenty, and the wearied travellers felt that they were at last approaching their ultimate goal.

Little did they know, however, how near they were. On July 24th, Stuart, who had only mentioned their near approach to the sea to two companions, and who wished to give the others something of a surprise, led the party down a creek which he named after Thring, his third officer; and, as they marched on, hour after hour, the trees became smaller and the vegetation more like scrub—the influence of the salt breeze. A valley suddenly opened before them, its other side bordered by a dense growth of scrub. The valley was crossed, the scrub penetrated; a few more yards, and Thring, who was just in front of Stuart, shouted out: "The Sea!" So surprised were the party that they could hardly believe him, but in a very short time they had satisfied themselves as to the truth of his exclamation, and were walking about on the beach and looking over the blue waters of the Indian Ocean.

Stuart's feelings when, after the years of toil and labour, privation and exposure, illness and disease

which had brought him nigh to death more than once, he had at last attained the consummation of his life's ambition, may be imagined; but we can be quite sure that they were far too mixed, too deep, too emotional for him to describe. His silence on this point is our best guide to his feelings. It was an hour of triumph, an hour of joy; it was also an hour when the head lost count of days and years, and the heart spanned the thousands of hours—of miles—he had wandered, in one swift, deep beat. The simple act which Stuart performed on reaching the shore is eloquent of feeling: "I dipped my feet and washed my face and hands in the sea, as I promised the late governor, Sir Richard McDonnell, I would do if I reached it."

Near to the spot where he had emerged from the bush, he had an open space cleared; he selected a tall tree and had its branches stripped off; and on the highest point he fixed the Union Jack, with his own name sewn to the centre. He wrote on a paper these words:—

"SOUTH AUSTRALIAN GREAT NORTHERN
EXPLORING EXPEDITION.

"The exploring party, under the command of John McDouall Stuart, arrived at this spot on the 25th day of July, 1862, having crossed the entire continent of Australia, from the Southern to the Indian Ocean, passing through the centre. They left the city of Adelaide on the 26th of October, 1861, and the most northern station of the colony on the 21st day of January, 1862. To commemorate this happy event, they have raised this flag bearing his name. All well. God save the Queen!"

His signature, and those of the rest of the party, followed. The paper was then placed in an air-tight case, and buried in the ground close to the tree; on the bark of the tree he cut "Dig one foot—S." And then his work was done.

I should add that when he returned to Adelaide, more than a year after he had left that city, it was

in a litter, so broken down was he in health; and his right hand, which had been so injured in the early days of the expedition, and which he had been compelled to use throughout the wonderful journey he had brought to so complete an issue, was useless for life.

To show that his work has resulted in much good, no words of mine are needed. When the telegraph wire was run across the continent it was laid, with trifling exceptions, in Stuart's track; those who have since found the most valuable minerals in Central Australia, were indebted to Stuart's carefully kept journals to guide them in their search; the stations of the colony have pushed far northward since his day, relying on his directions as to water and grass; those explorers who have opened up the country on either side have used Stuart's well-beaten track as the base of their operations; and the great trans-continental line of railway, which is to revolutionise the business and life of our Island Continent, is to follow in the path which Stuart, with undaunted pluck and with wonderful perseverance, first made for the white man. Though not the first, he may be regarded as the greatest of the pioneers of Australia; none has exceeded him in lofty aim and high endeavour, and none has earned and received from his countrymen so great a meed of honour and gratitude.

The days of Stuart have passed: the peculiar difficulties of Australian exploration have, since his time, been met and overcome by new means. Horses have given way to camels—owing largely to the foresight of Sir Thomas Elder, who succeeded Chambers and Finke as a patron and consistent supporter of colonial exploration. In 1866 he imported camels from Asia, and proceeded to acclimatise them. This necessary end attained, they were utilised as beasts of burden and carriage through the long waterless wastes of the interior. The wonderful journeys which Warburton, Gosse, and Giles performed with these "ships of the

desert," proved beyond question that the perils which had beset Stuart in his great journeys were practically past. In the future, travellers would be able to travel their one hundred and fifty, two hundred, aye, and even three hundred miles without being dependent on the presence of water. It has been well said that "the camel, the Bedouin life, and the great plain of Central Australia are all well adapted to each other." Experience has proved it. At many points across that vast plain, one can observe the Arab life. Afghans, with their camels and tents, wander about apparently as contentedly as they do across the plateaux and steppes of Western Asia. The grassed country is being covered with sheep stations; the sandy country claimed by ostrich farms; the McDonnell and other ranges are invested by mining camps; and cotton and sugar are being raised on the shores of the Indian Ocean. All these industries have been rendered possible by the discoveries and experience of the bold explorer whose famous journeys through "Darkest Australia" I have here sketched. To the deeds of John McDouall Stuart "Young Australia" gratefully points as the inspiring source of its advance across a region which he was the first to reveal.

As I write, I hear that the last blanks on the map of the fifth continent are about to be filled up; that Sir Thomas Elder has equipped an expedition for the investigation of those few portions which are as yet unexplored. Under the leadership of David Lindsay, who has won his spurs in more than one arduous journey of exploration, the expedition is to travel over country which lies to the west of Stuart's track. The first region to be reported upon, and roughly surveyed, lies between the routes of Gosse, Giles and Forest, and is some 340,000 square miles in extent—nearly seven times as large as England—a blank filled in on the map as the "Great Victoria Desert." The district they next pass to is north of Giles's most northern track (1876), Warburton's route (1873), and is at

present marked upon the map "Great Sandy Desert"—nearly four times the size of England—and after this has been traversed, the expedition will explore a region which may be said to be bounded on the west by Western Australia, on the east by Stuart's track, on the south by the ranges lying immediately north of the McDonnell Range, and on the north by the area explored by Gregory in 1856 in the basin of the Victoria River. This district, though the smallest, has more than twice the area of England. A surveyor, geologist, doctor, naturalist, and photographer are on the staff; and forty-four camels, with four Afghan drivers and a native guide, have been taken. From such an expedition, fitted out at great cost to complete the exploration of a continent only one-fourth smaller than Europe, and presenting physical difficulties which Europe has probably never presented since man made his appearance on the earth, we may naturally expect great things. New areas for pasturage, for mining, for habitation, will in all probability be discovered. In the departments of geographical and geological science we may expect to receive new facts; and to the great biological sciences we may reasonably hope for the addition of new genera as well as new species. But whatever be the outcome of this, the last great exploring expedition into the interior of the continent whose mysteries, long hidden, are now so almost entirely revealed, one may feel sure that the experience and the pluck of John McDouall Stuart will be a guide and a stimulant to these his successors, and that their aims and efforts are as direct an inheritance from him, as his were from those of the less successful explorers who preceded him.

And while we speak and think of success, and predict the great future which Australia has before her, it is well to remember for a little space those explorers and pioneers who went out into the wilderness of the unknown, and there laid down their lives. It is good, even when we behold the direct outcome

of the magnificent pluck which led Stuart across the continent to a success he most richly deserved, to look back upon those who struggled but never conquered, who sought but never found: of men like him of whom the Australian poet, Charles Allan Sherard, has so finely written in his "Lost in the Mallee":—

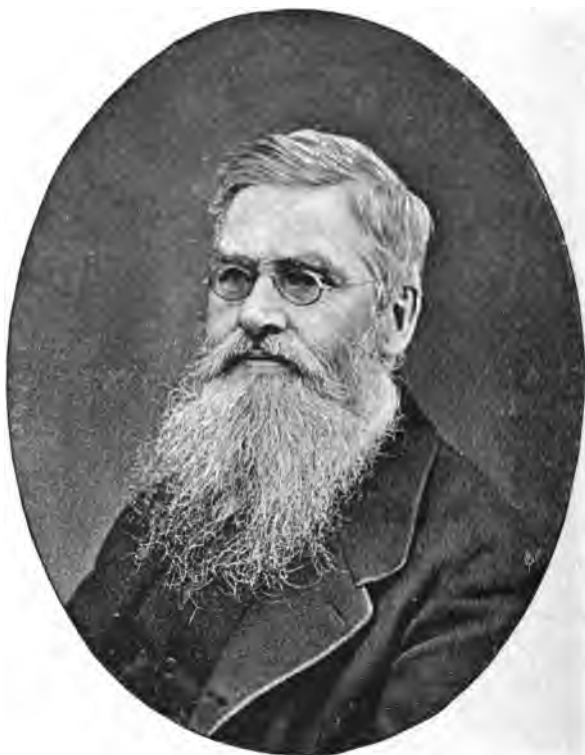
"The morning in the Mallee is suffused with genial glow;
While the dying hound is watching o'er the sleeper lying low,
Who is dreaming at the day-birth of the days of long ago,
Of the days of deep desire and dreams of doing doughty deeds;
Ere the flowers of hope were strangled with a multitude of
weeds—
Of the days when gallant comrades shared the glory of his
youth,
And his bright ideal of woman seemed a warm and living
truth.

"Not a murmur breaks the silence in the solitude of scrub,
Where lies the whilom favourite of the mess-room and the
club,
With a ragged blanket round him, and the earth his only bed—
Not a murmur breaks the silence, as he lifts his weary head,
To find his dumb companion on the ground beside him—dead.

* * * * *

"Through the madding maze of Mallee, while the sun is at its
worst,
Slowly staggers in a circle one, whose throat is parched with
thirst—
Miles and miles he wanders onward, hearing nothing but the
sound
Of the crackling of the dead-wood on the broiled and burning
ground,
And the dusk beholds him dying, as the dawn beheld the
hound."

WALLACE AND THE MALAY
ARCHIPELAGO.



ALFRED RUSSEL WALLACE.

From a photo, by Messrs. Maull & Fox.

WALLACE AND THE MALAY ARCHIPELAGO.

1854—1862.

UNLIKE the other journeys which are included in this book, the wanderings of Alfred Russel Wallace about Malaysia were extended over several years, and carried him to countries and peoples differing widely one from the other. He made some sixty separate journeys, and in the course of them travelled about fourteen thousand miles in the Archipelago. During this period he collected and sent home more than a hundred and twenty-five thousand specimens of natural history, and, in addition to exploring many islands which had never before been visited by a naturalist, he made so large a number of discoveries, anthropological and zoological, and brought before the general as well as the scientific world so many wonders of nature in that vast region, that I may well place him among other leaders into unknown lands, even if I omit to mention his earlier explorations on the upper Amazons and Rio Negro rivers—explorations which proved him to be not only a most zealous student of the lower branches of animated nature, but also a most acute observer of the manners of those curious tribes among whom he lived and laboured for so long.

It would be impossible, of course, to describe all Wallace's many journeys in Malaysia, or give to the general reader his observations and conclusions in their

entirety ; but in the following chapter I shall hope so to guide my reader in the steps of the great traveller, that nothing of importance, nothing of adventure, nothing of interest that befell him may be passed by. And it may be useful, here and there, to supplement these records by the observations of those who have passed over his tracks in more recent years. But in the first place I would introduce—in a very few words—the very interesting man whom this chapter concerns.

Alfred Russel Wallace was born in January 1823 at Usk, and educated at Hertford grammar school. In his early years he was engaged as a surveyor in various parts of England, and thus acquired not only some taste for travel but also the power of tracing and preserving his route. When about seventeen years of age, he began to take great interest in natural history, and all the time he could spare from his regular work was given to botanical excursions, to forming a collection, as well as to the study of the works of travellers. From surveying he drifted into school-mastering, and it was while engaged in the somewhat flavourless task of teaching the young of the middle-class parent the elements of their own language, that the great friendship of his life was made—the friendship which was to divert the current of that life, and release him from the narrow confines of the schoolroom, to send him forth free to roam in the ample regions of the tropical world. While acting the usher at Leicester he got to know Henry Walter Bates, even at that time a most ardent entomologist, but as yet untravelled. This was in 1845. A year or two later Wallace proposed to Bates that they should proceed together to the Amazons, and there collect specimens of natural history. Neither had means, but the collections could be sent back to England from time to time, and their sale would pay all expenses. This plan was adopted, and the two naturalists left London in April 1848, arriving at the Amazons some four weeks later. They travelled together for two years,

and then Wallace proceeded alone to the Rio Negro, in the basin of which river he spent two years more. He finally returned to London in 1852, after a narrow escape from death through the destruction of his ship by fire. He lost, most unfortunately, a large portion of his collections, and most of the notes and journals he had kept when on the Rio Negro. However, his book, "Travels on the Amazon and Rio Negro," met with such a success that he was enabled, in the following year, to start for the far East, there to continue his researches in the many phases of tropical life among the little known and largely unexplored regions of the Malay Archipelago. Mr. Bates—so well known in later years, to all travellers, in his capacity as assistant secretary of the Royal Geographical Society—remained in the valley of the Amazons seven years longer, and published on his return that fascinating book, "The Naturalist on the Amazons."

Wallace arrived at Singapore in July 1854, and from that time till 1862 he was engaged in those travels and observations, the sum of which are included in this chapter. But it was not until six years after he had returned that he published his most interesting and valuable work, "The Malay Archipelago,"—the interval being occupied in classifying and arranging the enormous collections which he had made. The greatest result of his wanderings in the archipelago is known to the world as "Wallace's Line"; that is to say, the boundary which his experience as a traveller, and his knowledge as a naturalist, enabled him to draw between those portions of Malaysia which belong to the continent of Asia and the continent of Australia.

"Wallace's Line" divides this great archipelago—which spans more than four thousand miles of longitude, and contains at least three islands in each of which Great Britain might be lost in a surrounding belt of forest—into two distinct portions, the western being Indo-Malaysia, and the eastern Austro-Malaysia. A number of reasons conduced to this division: geological,

zoological, and botanical. Changes in land elevation have occurred in every part of the world during many geological periods; and the process of change still continues. In one region we find elevation, in another subsidence. And with the gradual change of the earth comes a gradual change in the features of its surface, whether they be cliffs or rivers, the vegetation or the animals. Thus an island may have many species closely resembling those of the adjacent continent, and yet possess species peculiar to itself—peculiar to its special circumstances and arising from its special conditions. According as the time that has elapsed since the separation of that island from the neighbouring continent be greater or less, so is the proportion of the resemblance of its fauna and flora to those of the continent. And one of the surest meters of the comparative lapse of time may usually be found in the depth of the sea intervening between land and land. Acting on these tried theories, Wallace proceeded to show that, although the seas are now wide between Borneo and Java, Sumatra and Siam, they are nevertheless so shallow that ships can drop anchor anywhere in them. From this fact he concluded that the subsidence of the land between those islands was comparatively recent, and that at one time they all belonged to the continent of Asia. Then he applied the zoological argument. Taking the elephant and tapir of Sumatra and Borneo, the rhinoceros of Sumatra and Java, and the wild cattle of Borneo and Java, he invariably found their allied species dwelling on the continent of Asia; and the same rule applied to the smaller mammals. Since, however, island life has conditions dissimilar to continental life, he found that there was that variety of species which might be expected and, indeed, is found all the world over under the like conditions. And his general conclusion was that as these great islands, each with their adjacent archipelagoes, closely resembled in their natural productions the southern parts of Asia—so closely, indeed,

that they might even have still formed outlying portions of that continent—therefore, there could be little doubt that Asia, at no (geologically) remote period extended at least as far as Borneo, and in all probability even to the Philippines.

But just as closely as this western group of islands resembles Asia in its fauna and flora, so just as widely does the eastern group differ. New Guinea, Timor, Flores and the Moluccas afford a striking contrast to the western islands; and yet they do not stand absolutely by themselves. For just as it was possible to connect the western group to the continent of Asia, so is it possible to link the eastern to that of Australia. And this is rendered more easy, and more certain, because the fauna and flora of Australia are not only extremely dissimilar to those of Asia, but are really unique. As Wallace has well said: "Australia, in fact, stands alone; it possesses no apes or monkeys, no cats or tigers, wolves, bears, or hyænas; no deer or antelopes, sheep and oxen; no elephant, horse, squirrel or rabbit; none, in short, of those familiar types of quadruped which are met with in every other part of the world. Instead of these it has marsupials only—kangaroos and opossums, wombats and the duck-billed platypus. In birds it is almost as peculiar. It has no woodpeckers and no pheasants, families which exist in every other part of the world; but instead of them it has the mound-making brush-turkeys, the honeysuckers, the cockatoos, and the brush-tongued lorries, which are found nowhere else upon the globe." And, therefore, because these animals are found in the eastern islands of the Malay Archipelago, and because the seas between these islands and Australia are much shallower than the surrounding ocean, Wallace concluded that those islands must at one time have been connected with Australia, and that, biologically, they are still connected with it. And therefore he named this eastern group *Austro-Malaysia*.

This "line" of Wallace's entered the archipelago a

short distance south of Mindanao—the southernmost of the Philippine Islands—and, curving south-west, passed between Celebes and Borneo, and thence through the narrow strait which separates the islands of Bali and Lombok. This strait, though only some fifteen miles in width, is the dividing line between one world and another; between the vegetation and animal life of the oldest continent and those of the newest; between Asia, the largest of the continents, and Australia, the smallest; between aspects of nature which have their counterparts spread throughout the world, and those which are only to be found in this region.

And yet—and this is a point on which Wallace has laid great stress—though the archipelago can be clearly divided into two groups when their natural productions are considered, there are no striking diversities of physical character. A vast chain of volcanoes is common to both; yet there is no common effect on vegetation. Borneo in the western, New Guinea in the eastern—though both, curiously, are outside the volcanic chain—in climate and geological formation are both similar; yet the greatest difference exists between their flora and fauna. They are—as Wallace has pithily said,—“constructed as it were after the same pattern, subjected to the same climate, and bathed by the same oceans”; yet they afford the sharpest contrasts when one looks at them from the naturalist’s point of view. Zoologically they are as wide apart as pole from pole; and there is no land which contains the animal life possessed by damp, malarious, mountainous, and luxuriant New Guinea except Australia, the continent of drought, parched plains and stony deserts!

But “Wallace’s line” is twofold; he drew one to divide two distinct aspects of nature, and he drew the other to separate man from man. He found that, roughly, Indo-Malaysia was inhabited by people of Malay stock, and Austro-Malaysia by Papuan tribes.

The line passes not west, as in the former division, but east of Celebes; and not between Bali and Lombok, but between Sumbawa and Flores, rather more to the westward. But later investigations having induced Wallace and other observers to place Celebes in Indo-Malaysia rather than in Austro-Malaysia, we can now say that the division, originally based on vegetation and animal life, is also based and maintained, and concurred in by the distribution of human life. Thus life—that greatest power known to us—from its lowest to its highest development, from the thing that creepeth on the face of the earth to that Man who stands erect, bears testimony and supplies argument for this great division of the Malay Archipelago by “Wallace’s line.”

But before passing with this great traveller to the lagoons, and coral reefs, and dense forests of Malaysia, I must just point out how, in one respect, he is entitled to the highest rank among modern naturalists. One result of his work in South America and Malaysia was his conclusion regarding the origin and variety of species. In 1855 he sent home a paper on “The Law that has regulated the Introduction of New Species,” and in 1856 he wrote to Darwin, himself engaged for many years on the same problem though it was then unknown to Wallace, and sent him a short paper on “The Tendency of Varieties to depart indefinitely from the Original Type.” This paper, together with Darwin’s own results, was read before the Linnæan Society; in all important particulars they were identical, and therefore both Wallace and Darwin, who, working independently, had arrived at the same conclusion, are entitled to equal honour for the discovery of that great law which has revolutionised modern science. But Darwin followed up this first declaration by the publication of his famous “Origin of Species,” in 1859, while his fellow-worker was wandering about the Malay Archipelago; and this and his subsequent works—especially “The Descent

of Man"—have established for him the first claim as the expositor of the law. Wallace, on the other hand, has been content to introduce that law, aptly and with force, into his various works based on his travels—into his "*Malay Archipelago*," "*Geographical Distribution of Animals*," "*Tropical Nature*," and "*Island Life*"; and to be at once the historian of the revolution, and prove himself a loyal and generous friend to his great co-worker in his most admirable book on "*Darwinism*." Nevertheless, it must not be forgotten that he was the co-discoverer of this "*Darwinism*."

After a short stay at Singapore, and a visit to Malacca—in the course of which he made a journey to Mount Ophir—Wallace proceeded to Borneo, and arrived at Sarawak on November 1st, 1854. In Borneo he stayed fifteen months, during which time he was busily exploring and collecting, and, in particular, securing specimens of the Orang Utan. His first journey into the interior brought him to the Simunjon river, and here, on the slope of a hill, he had a two-roomed house built, in which he lived for many months. The spot was a favourable one for a naturalist; for not only was the forest dense for hundreds of miles round, but a large number of Chinese coolies were at that time employed by the Rajah of Sarawak in clearing parts of this forest for some industries just opened, and, indeed, were making a rough sort of road thence to the more settled parts. The continual felling, and the rapid rotting of an enormous number of trees, provided Wallace with a happy hunting-ground, so happy, indeed, that he collected in the first fortnight more than double the number of species which he had obtained in the four previous months. To give an idea of the prolific state of insect life in a country like Borneo, I may mention that he collected in *one day* seventy-six different species of insects; that in the course of six weeks he had obtained over a thousand different species, and

that, at the end of his visit, he carried away with him more than two thousand different species, nearly every one of which were collected within a mile of his hut on the Simunjon river. Of Longicorns, alone, he obtained some three hundred species, many of them having antennæ of immense size. Here, also, he obtained the first known specimen of the "flying frog." This is a frog which, though not a member of the genus *Hylidæ*—the true tree-frogs—is yet in its habits an inhabitant of trees and, in addition, descends to the earth by flight through the air. It has, of course, no wings, but its webs are so largely expanded as to present a surface of resistance, altogether some twelve square inches in extent. The frog, therefore, uses them as a sort of parachute; just in the same way as many observers believe the flying-fish does. Of course the zoological interest of this species lies in the fact that the toes of a frog, which were first modified in order that it might climb trees as well as swim, have, in this particular species, been utilised (and modified by use) to enable it to descend rapidly to the ground through the air.

But perhaps the most interesting work of Wallace while in Borneo was his zealous pursuit and capture of the Orang Utan. This is one of the four genera of apes at present known; one of which, the *Troglodytes* (Chimpanzee and Gorilla), is found only in Western Equatorial Africa; and the remaining three, *Simia* (Orang Utan), *Hylobates* (Gibbons, or long-armed apes), and *Siamanga*, only in Asia, and, to be particular, only in South-eastern Asia—including, of course, the Indo-Malaysian Archipelago. The Orang Utan, or Mias, as the natives generally call it, is found in Borneo and Sumatra; and just as rarely in the latter island as it is frequently met with in the former. Within a week of his arrival at his new quarters Wallace first met this formidable ape, a few hundred yards distant from his house. It was passing rapidly from tree to tree, and was soon lost in the thickness

of the jungle. Not long afterwards, however, he came across another, which gave vent to its rage by howling in a cough-like way, and breaking off the nearest branches and throwing them down to the ground. This he shot, but it proved to be a female and not so large or monstrous as the male, yet its arms had a spread of six feet six inches, its height being about three feet six inches. The skeleton of this creature can now be seen at the Derby Museum. A few days after securing this mias Wallace shot another, which also proved to be a female, and near the spot where she fell he found a little mias which had been hanging on to its mother, as the young of the apes always do. When she was killed this young mias, though only about a foot long, was very strong and active, and Wallace found it a very difficult matter to make it leave go of anything round which it had once hooked its fingers.

His experiences with this young mias during the three months it lived are most interesting. When he first had it there were no signs of teeth, but very soon several were "cut." There being no milk obtainable he was at a loss to know how best to feed it, and though he was able to teach it to suck rice-water through a quill stuck into the cork of a bottle, he soon found out that soaked biscuit, with a little egg and sugar, was appreciated and preferred in a spoon! Referring to its behaviour he says: "When handled or nursed it was very quiet and contented, but when laid down by itself would invariably cry; and for the first few nights was very restless and noisy. I soon found it necessary to wash the little mias as well. After I had done so a few times it came to like the operation, and as soon as it was dirty would begin crying, and not leave off till I took it out and carried it to the spout, when it immediately became quiet, although it would wince a little at the first rush of the cold water, and make ridiculously wry faces while the stream was running over its head. It enjoyed

the wiping and rubbing dry amazingly, and when I brushed its hair seemed to be perfectly happy, lying quite still, with its arms and legs stretched out, while I thoroughly brushed the long hair of its back and arms. . . . It was a never-failing amusement to observe the curious changes of countenance by which it would express its approval, or dislike, of what was given to it. The poor little thing would lick its lips, draw in its cheeks, and turn up its eyes with an expression of the most supreme satisfaction when it had a mouthful particularly to its taste. On the other hand, when its food was not sufficiently sweet or palatable, it would turn the mouthful about with its tongue for a moment, as if trying to extract what flavour there was, and then push it all out between its lips. If the same food was continued it would set up a scream and kick about violently, exactly like a baby in a passion. When I had had it about a month it began to exhibit some signs of learning to run alone. When laid upon the floor it would push itself along by its legs, or roll itself over, and thus make an unwieldy progression. When lying in the box it would lift itself up to the edge in an almost erect position, and once or twice succeeded in tumbling out. When left dirty, or hungry, or otherwise neglected, it would scream violently till attended to, varied by a kind of coughing or pumping noise, very similar to that which is made by the adult animal. If no one was in the house, or its cries were not attended to, it would be quiet after a little while; but the moment it heard a footstep would begin again, harder than ever."

However, this most interesting baby died after Wallace had kept it for about three months—the diet he was compelled to give it not being suited for its tender age. About a week after its first capture he had shot his first full-grown male; and some account of this should be interesting, not only as showing what the full-grown male is like, but also the peculiar difficulties of bagging it.

Wallace heard the creature moving from tree to tree for some time before he could see it. At last he caught sight of it, high above, near the top of a tall tree. Its huge body was covered with reddish hair, and its black face was looking down upon him. Wallace fired and the mias disappeared. After a while he again caught sight of his quarry, and put in two more shots, which hit it but did not bring it down. Again the mias swung from tree to tree, but this time less rapidly, one leg having been broken by a shot. Twice again did Wallace shoot, and the plucky beast, deterimned to die game, settled itself in the fork of a tree so that it could not fall, however wounded it might be. And badly wounded it must have been, for after a short time, while Wallace and his Dyak attendants were pulling at



ORANG UTAN.

the creepers and rope-like stems which envelop nearly every tropical tree, and shaking the tree in which it had ensconced itself, it suddenly fell with a tremendous crash through the branches, and landed on the ground with a heavy thud and just one spark of life left in it. It was a monster. The span of its arms was 7 feet 3 inches, its height 4 feet 2 inches, and the

chest measurement 3 feet 2 inches. After this he shot several adult orangs, one of which was an immense creature, having an arm span of 7 feet 9 inches, a chest measurement of $43\frac{1}{2}$ inches, and a face $13\frac{1}{2}$ inches wide! The height was the same as that of the other full-grown males—4 feet 2 inches, and this is probably the average maximum—though the arms and chest increase after the upward growth has ceased. On another occasion he shot a full-grown male which, as in several instances, immediately began to take steps to prevent its falling to the ground. Though one of its arms had been broken by the shot, with the other it rapidly bent and broke off branches, and twisted and plaited them together into a platform, which easily bore its weight and almost screened it from view. Wallace shot several times at it and killed it; but he was unable to persuade some Chinese coolies who had been working in the neighbourhood to cut down the tree. However, some two months later, when the tropical sun and a horde of flies had done their work, a couple of Malays climbed the tree and let what was left of the poor beast down, and Wallace secured not only a perfect skeleton, but a very excellent find in the shape of insects and their remains.

The orang utan lives in the swampy forest: it is its "open country." Day after day and mile after mile it can walk from tree to tree without needing to come down on the ground, where it is—comparatively—at a disadvantage. It walks slowly, as a rule, along the boughs, swinging itself from tree to tree. It is curious to see it taking several of the smaller branches in its hand and testing their strength before it swings itself into the air by them. Its arms are so long, in comparison with its legs, that it naturally walks in an almost upright position, but when on the ground it usually runs on all fours, if it does not even propel itself chiefly by its arms. When attacked, however, it stands erect and displays considerable courage. Wallace says that it never

jumps or springs, but at the same time can get along almost as rapidly as its hunter, man, can run through the jungle below. He also points out that it does not appear to have great fear of man: "They often stared down upon me for several minutes, and then only moved away slowly to an adjacent tree. After seeing one I have often had to go half a mile or more to fetch my gun, and in nearly every case have found it on the same tree, or within a hundred yards, when I returned."

Those of us who know what strength the crocodile has in its jaws, and what execution it can do with its tail, will be able to estimate the strength of the orang utan by the following statement of a Dyak chief; a statement there is every reason to believe to be true:—"No animal is strong enough to hurt the mias, and the only creature he ever fights with is the crocodile. When there is no fruit in the jungle he goes to seek food on the banks of the river, where there are plenty of young shoots that he likes, and fruits that grow close to the water. Then the crocodile tries to seize him, but the mias gets upon him, and beats him with his hands and feet, and tears him and kills him." Other Dyak testimony declares that the mias always kills the crocodile by main strength, standing upon it, pulling open its jaws, and ripping up its throat.

After these very interesting discoveries regarding the "man of the woods," Wallace penetrated still further into the interior, journeying by canoe as well as on foot, and staying at the "head house"—a sort of Dyak Town Hall, where strangers are allowed to put up—of the various villages through which he passed. Sometimes the river would be deep and broad, and at other times he would only be able to pole his canoe up the swift and shallow stream. Yet again he would be following the narrow native paths which go through the forest or skirt the precipices of high ranges. Many a time, too, he would have to

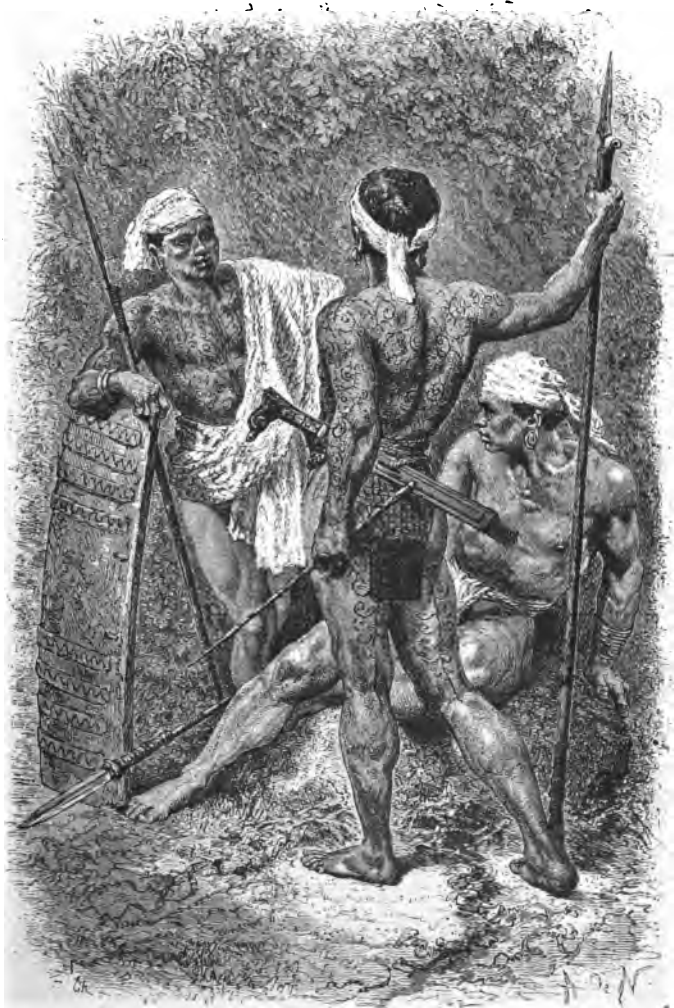
cross bridges, fifty and sixty feet above the gorges and torrents they spanned, which were merely a single bamboo some four inches in diameter—a species of tight-rope walking which was often more highly spiced with the element of danger than agreeable. On the river-banks and in the forest he found many fruit trees, of which the durian and mangosteen were the chief. Wallace became a convert to the delights of the durian, although it takes by no means little time to ignore its unpleasant odour. The durian resembles a cocoa-nut in size, and though not covered by a similar fibrous mask its rind is thick and very strong and its surface somewhat like a pine-apple, but armed with extremely sharp spines. It grows on a lofty forest tree, and being heavy as well as amply provided with these spines, frequently injures and even kills the unfortunate passer-by on whom it falls. It always inflicts a very severe wound. The durian splits open into five parts, in each of which is a mass of creamy pulp, which has been variously described as “a rich, butter-like custard, highly-flavoured with almonds,” and a mixture of “cream-cheese, onion-sauce, and brown-sherry!” Be that as it may, it is a most delicious fruit, and many people consider it to be the king of tropical fruits. Personally, I prefer the mangosteen, which has an equally pleasant flavour, with the additional advantage—in a hot country—of being always quite cold. This, with its slightly acid taste, makes the mangosteen exceedingly welcome. In connection with the durian, however, Wallace has pointed out that it and the Brazil-nut fruit are both large, heavy fruits, growing on lofty trees, and thereby done well to show the fallacy of some moralising but inaccurate “scientists” who, arguing from English trees and fruits, have held that small fruits grow on lofty trees, and large fruits on the ground, for the express convenience and safety of man. Now, as both the durian and Brazil-nut fruit—which are equal in size to large cocoanuts and possessed of greater weight—

grow on large trees, and fall from them as soon as ripe, thereby often killing the passing native, two conclusions arise: First, that to generalise from particular or partial knowledge is unscientific, and therefore will lead to misstatement of fact; and, secondly, that both the vegetable and animal kingdom enjoy an organisation which has no special provision for the safety of man. This must be the result of all reflection. Man, in his lowest state, is not specially protected from the innumerable dangers which surround him, and are as peculiarly his as the enemies of birds and fish are peculiarly theirs; it is only by his own unceasing effort that he is able to subjugate the powers of nature, animate and inanimate, which make up the sum of his surroundings, and ensure to himself reasonable protection from wild beasts, a rapacious jungle, or the fell attacks of disease arising from total neglect of sanitary first principles.

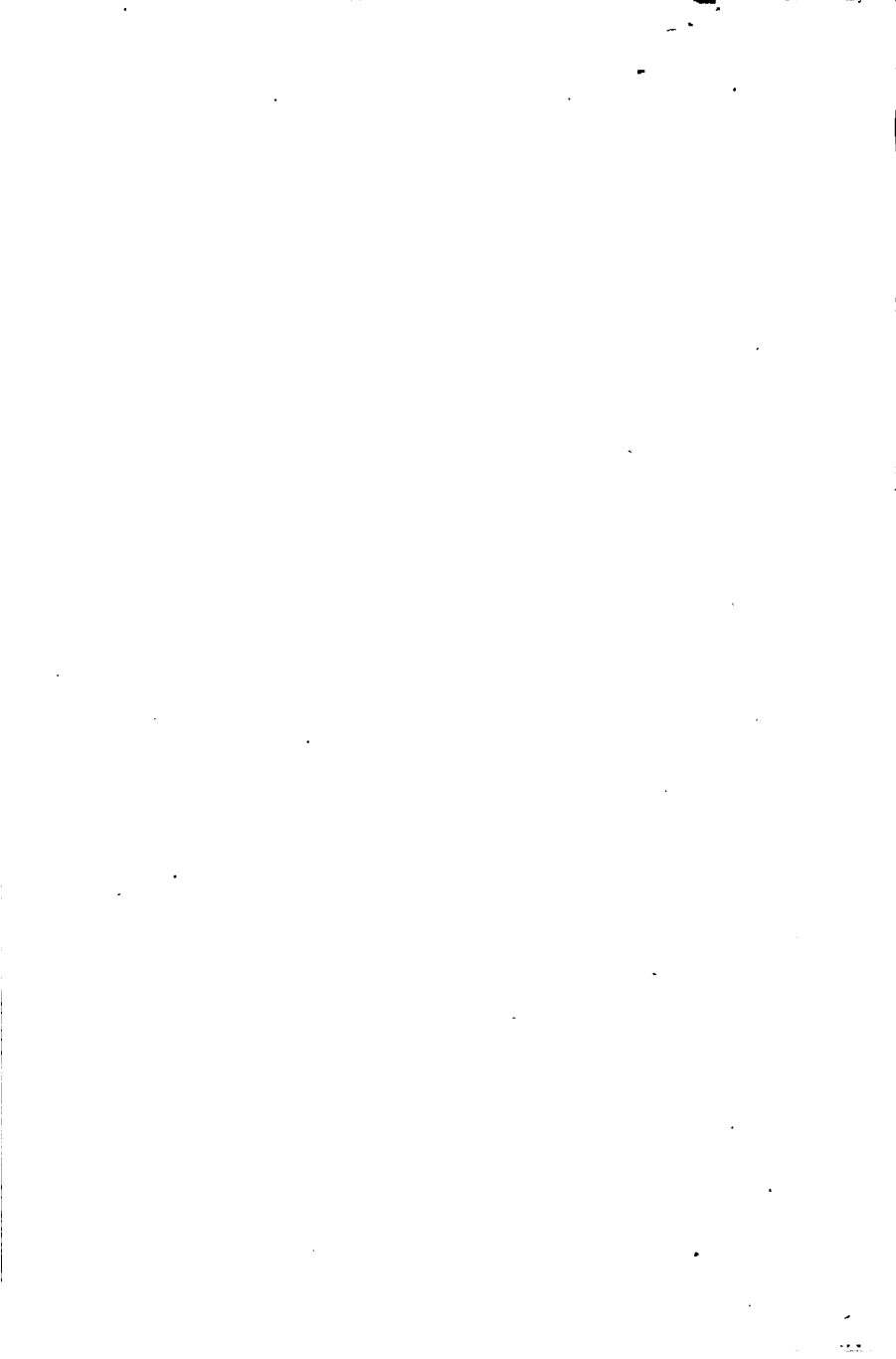
Let me give an example. It was while journeying up and down the fertile districts of Borneo that Wallace was first impressed with the admirable use to which man, by exercising his intelligence and making continual efforts, has put bamboo. This grass,—for grass it is, in a botanical sense—often reaches the height of a tree; some species will send up their canes as much as fifty and sixty feet in a single season. Other species will attain a diameter a foot through. For strength and lightness, combined with straightness and smoothness, the bamboo has no equal in the vegetable world. It can be split with ease and exactness; it grows in a multitude of sizes, its joints are all lengths; it has no unpleasant smell—like so many tropical woods—and its taste is not the least injurious. It grows with marvellous rapidity, and maintains a most regular cylindrical form. And it can be pierced through, or cut across, or sliced lengthways, without splitting or losing its characteristic qualities.

This being so, how have the Dyaks of Borneo—who possess but knife and axe—made use of this most

valuable grass? First, in their houses: these they always floor with split strips of bamboo, which are cleanly, strong, and pleasantly elastic to the tread. Next, their utensils are made of bamboo: thin and long-jointed bamboos holding their water; in thick and short bamboos, they boil their rice and vegetables; in bamboos sealed at the top they preserve their fruit and fish, and keep their sugar, honey, and what not. When the Dyak sits down to enjoy his pipe it is into a bamboo bowl that he puts his tobacco, and through a slender bamboo stem that he draws the smoke. When he wishes to indulge in his favourite betel-nut, it is out of a small bamboo case hanging at his side that he takes the lime, the areca or betel-nut, and the leaf of the Piper-Betel. And then, having smeared the lime on the leaf and wrapped the latter round the nut, he puts the package into his mouth, and there it bulges in his cheeks while its hot and acrid, though aromatic qualities, cause rapid secretion of saliva, which—tinged red by the nut—very soon makes its appearance not only on his lips but on every available space in his vicinity. It is also into a bamboo sheath that the Dyak drops the long-bladed knife (which he wears in common with every native in the whole archipelago). When he goes fishing he makes his trap from the bamboo; when he wishes to catch a bird, or keep it when caught, trap and cage are made alike of bamboo; of bamboo, too, are his poultry-run and hencoop constructed. Whenever we should use a bottle, or a jar, or a vase, he would use a bamboo. But there are still many more uses to which he puts this gigantic grass. He uses it to make steps up the steep slippery sides of his mountains, and with it he makes bridges over his rivers. The curious ladders which the Dyak fixes to the tall straight stems of those forest trees which he climbs for the wax of the honey-bee—stems that are often for a hundred feet devoid of branch or knot—are made of bamboo, pegs of which he drives in as he



DYAKS.



ascends. When he arms himself for war the shaft of his spear is as often as not of bamboo, and his shield is a compact mass of bamboo strips welded together by rattan bands. Such are a few of the uses to which the Dyak can put this valuable grass, which left unutilised would be merely a jungle barrier to the opening up of the country, and the lair of the wild beast.

The Dyaks show their kinship to the great body of Malays by their brown skins, jet-black and lanky hair, almost beardless faces, and pronounced cheek bones. In moral character, as well as in their physique, they may be considered the superior of the Malay. They are less crafty than either Malay or Chinese, and, in many respects more sociable, create a better impression. The prevalence of games among the Dyak youth is also another characteristic; the young Malay being little inclined to such sports. Truthful and honest, temperate and not bloodthirsty, they constitute a race by no means unworthy of our consideration. But of course they have their failings—laziness, indifference, and that habit of dilatoriness which distinguishes most savage and semi-savage nations. The Dyaks, too, have held bad characters as pirates and murderous people for many years, but, apart from their custom of “head-hunting”—a custom dying out in many parts of the archipelago—they are not so black in their deeds as they are painted. The Dyaks who live in the interior are, of course, not pirates; and those who dwell on the coast have proved amenable to the views of civilised traders and governments.

Though dying out in many districts of the western half of the archipelago, “head-hunting” is rife enough in the eastern half, and the Solomon Islands in the extreme east are famous for their head-hunters. Mr. Charles Morris Woodford lived for some time during the years 1886-88 on these islands, and in his very interesting book, “A Naturalist among the Head-Hunters,” he gives us some horrible descriptions of their practices. During a fortnight’s visit to the

Rubiana lagoon, in New Georgia, as many as thirty-one heads were brought back by the hunters. "It appears," says Mr. Woodford, "to be a perfect passion; it is a frequent sight to see the great canoes, carrying thirty or forty men apiece, their spears and rifles piled amidships between the two rows of paddlers, start on these expeditions. . . . They delight to surprise a village at daylight, and stationing men at the narrow doors of each house, tomahawk the inmates as they try to escape. At other times they will spend a day or two in a friendly manner with the natives of another village, trading and buying slaves, and at an arranged signal turn upon their entertainers."

To this last instance of savage treachery it would not be difficult to supply a parallel in the history of Christian England not two centuries since—the Massacre of Glencoe. Moral: We are nearer to the savage than we may think. At any rate, let us not judge him without mercy.

From Borneo, Wallace crossed to Java, over much of which he travelled, lost in admiration at the excellence of the Dutch Government and the system by which the Dutch had induced the natives to devote themselves to the raising of such products as coffee and sugar. The system is one of paternal government which requires an implicit obedience on the part of the governed, and as it is so evidently to the advantage of the natives that they should earn wages, have plenty to eat, enough to do to keep them out of mischief, as well as a sort of commission on the fruits of their industry, they have never offered any serious resistance to the system. As a consequence, Java is not only the richest, most luxuriant, and most populous of all tropical islands, but it is also the best governed and most contented. So well developed is it, indeed, that the Dutch officials have long ago rendered exploration impossible, and, consequently, it was not long before Wallace moved on to Sumatra, whither we will follow him.

But one word, first, about the dominant characteristic of Java. Throughout the length of the island—six hundred miles—runs a continuous chain of volcanoes, active or dormant. There are nearly fifty great volcanic peaks, eight of which exceed a height of ten thousand feet. Of these volcanoes some twenty are now active. The soil which they have scattered over the island is, of course, immensely rich and fertile, and is kept well watered by the streams which flow down the flanks of the great mountain backbone of Java. On this island—not so large as England—some twenty-five millions of people exist, in perfect prosperity and abundance. But there is one great factor which introduces into life in Java an uncertainty which is, perhaps, greater than that which naturally exists everywhere. The earthquakes are so frequent, and the eruptions are on so enormous a scale, that in the course of a generation many thousands of acres are successively taken out of cultivation and great loss of life incurred in the various districts affected. Comparatively recently—in 1883—Krakatoa, which lay just off the western extremity of Java, in the Straits of Sunda, and whose graceful contour I well remember admiring in the course of my own voyage through Malaysia, was completely blown up. The series of explosions which removed this vast mass of matter, while they discharged an almost incalculable quantity of fresh material from the bowels of the earth, were heard as far off as Manila, New Guinea, and even in Ceylon, while the ashes were spread over a district more than two hundred thousand square miles in extent. After the explosions came what is even more dreaded—vast sea waves, which deluged the shores of Java and Sumatra and destroyed some forty thousand persons. It has been calculated that the eruption of Krakatoa created such a disturbance in the atmosphere of this planet that air-waves passed more than three times round the whole globe, and my readers will remember the remarkable red sunsets which, for more than two

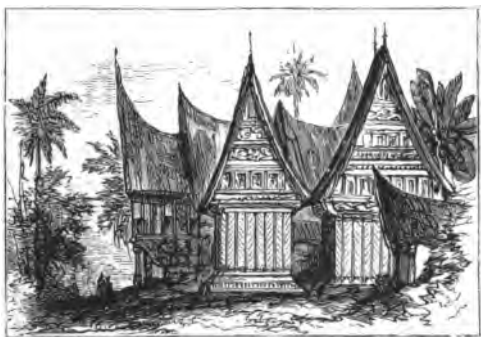
years afterwards, occurred in England, as in all regions of the world—the result of the fine atoms of volcanic dust which were then set in motion on those currents of the air which, in turn, bore them to all parts of the earth.

Sumatra is much larger than Java, and is also traversed by a volcanic chain. Yet, although some thousand miles in length, it supports a comparatively small population of scarcely four millions. The Dutch have gradually invested it on all sides, and though long resisted by the warlike Achinese in the north, have extended their rule thither and occupied the towns of their implacable foes. Under the sensible system which characterises the colonial policy of the Netherlands, Sumatra will rapidly become, with its wide, well-watered eastern plains, a centre of industry and civilisation as remarkable as Java.

But in Wallace's day the Dutch had much yet to do before they could consider themselves masters of the island. After a short stay at Palembang, which he reached by a boat voyage of one hundred miles up the river Musi, he started inland for an exploration of its forest depths. The farther he went the more difficult he found it to make himself understood, the Malay tongue degenerating, as is its wont, into as many dialects as there are tribes. With the villages of the Sumatran Malays he was much impressed. These moderately industrious people clear a large space of land which they enclose with a lofty fence. Within this fence they set their houses, much as each owner pleases. Like most Malays—having no doubt at one time dwelt along the coasts, or in the river-estuaries, for they are essentially a maritime people—they erect their homes as aforetime on a series of posts several feet above the level of the ground. Those of the better sort are built of planks, those of the baser of bamboo. In all cases the floors are made of bamboo strips, neatly laid. The roofs are high-pitched and the gables run suddenly up to a remarkable point,

which gives them the appearance of a huge thorn. The gable-ends are often exceedingly well carved.

The great objection to a Sumatran village is the habit of making a general sink and cesspool of the ground immediately under each house; an inveterate habit which is traceable, probably, to the days when these houses stood in running water, which rapidly carried away all matters of offence. I might say, in passing—so deeply rooted and widely dispersed is this love of marine life through the archipelago—that the inhabitants of the Solomon Islands, who are



A SUMATRAN VILLAGE.

not even of Malay origin, no sooner find a reef exposed at low tide than they occupy it, build up a platform and wall of coral blocks, and then erect their huts.

It was while in Sumatra that Wallace found the one species of the fourth genus of apes—the Siamang (*Siamanga syndactyla*). It is allied to the long-armed Gibbons, but differs by having the second and third toes united up to the middle of the second phalanx. It is also slower in its movements, although when necessary it swings itself from tree to tree with great rapidity. The height to which the siamang grows is usually about three feet, and its arm-span is as much as five feet six inches. Wallace

obtained a young one, but as it conceived a great dislike for him he was unable to teach it anything, or learn much from it beyond seeing it willingly play with Malay boys. But Mr. George Bennett tells us, in his "Wanderings," that a siamang in his possession, on observing some Malays standing near, deliberately took off its belt—though not without much trouble—and walked erect to them, hugging their legs but not allowing them to take it, until it reached a lad, its former master, when it immediately climbed up into his arms with every expression and sign of delight.

The rainy season now interfered with Wallace's "bug-hunting," and he accordingly returned to Singapore, his head-quarters. From here he intended to go direct to Macassar in Celebes; but as he was unable to find a ship that was then sailing for Macassar he took passage in one which, by great good fortune, landed him on the islands of Bali and Lombok. If this had not happened it is quite probable that he would never have found how closely drawn together were the two great zoological divisions of the Eastern Hemisphere. As it was, not anticipating this discovery, he did not exert himself during his brief sojourn on Bali as he otherwise would have. On landing at Bali he found a large number of Chinamen who had adopted Malay dress, and were rapidly proving how closely related at bottom are the various branches of the Mongolian race. In penetrating to the interior he met with large herds of cattle, and an extraordinary degree of cultivation. Weaver birds, orioles and wagtails were the most common among the birds. But he was obliged to pass on to Lombok, that being the destination of the ship.

Off Ampanam they anchored, and he and his baggage were safely landed through the tremendous surf which beats upon the sloping beach of that coast. "Sometimes," says Wallace, "this surf increases suddenly, during perfect calms, to as great a force and fury as when a gale of wind is blowing, beating to pieces all

boats that may not have been hauled sufficiently high upon the beach, and carrying away incautious natives. This violent surf is probably in some way dependent on the swell of the great southern ocean, and the violent currents that flow through the straits of Lombok. These are so uncertain, that vessels preparing to anchor in the bay are sometimes suddenly swept away into the straits, and are not able to get back again for a fortnight! What seamen call the 'ripples' are also very violent in the straits, the sea appearing to boil and foam, and dance like the rapids below a cataract; vessels are swept about helpless, and small ones are occasionally swamped in the finest weather and under the brightest skies."

As soon as he had settled into quarters at Lombok, and begun observing the natural productions of the island, Wallace discovered that there were many new aspects of animal life. In the neighbourhood of the town there were large numbers of "quaich-quaich," birds allied to the well-known friar-bird of Australia, and which had received this curious name at the hands of the natives in imitation of its peculiar and unmelodious notes. A large number of birds displaying Australian forms were met with, and he found the white cockatoos very prevalent—a point worth noting, as this is their westerly limit. Many other birds, also, which are frequent in the Eastern Archipelago, are first encountered in the island of Lombok.

Among these Wallace particularly mentions the "mound-maker" bird, which belongs to a comparatively limited genus only known to exist in Australia and its adjacent islands. In some respects they resemble fowls, but, instead of sitting upon their eggs, they scratch together with their large feet and formidable claws a mound of earth, leaves, and any kind of dry rubbish which may be lying on the earth, and in this mound they deposit their eggs, trusting to the heat of the sun or to the force of fermentation to hatch them. These mounds are sometimes as much as

twelve feet long and six feet high, and of course are made by the united efforts of a number of birds. The dull red eggs of the mound-maker are much sought after by the natives, and as the average size of an egg is equal to that of the swan's, and some forty or fifty are often found at a time in one mound, it can easily be imagined how considerable an item of food the eggs of the mound-maker become.

Wallace, in fact, had come to a perfect land of birds. Large green pigeons, kingfishers, the Australian bee-eater, ground-thrushes, grass-green doves, crimson and black flower-peckers, metallic king-crows, golden auriolles, jungle cocks, cuckoos, form only a very few of the interesting and beautiful birds whose habits he was enabled to observe, and several species of which he was fortunate enough to procure.

We can catch a glimpse of the life of this great naturalist in an interesting passage in which he describes the somewhat confined quarters he occupied: "One small room had to serve for eating, sleeping, and working; for store-house and dissecting room; in it were no shelves, cupboards, chairs, or tables; ants swarmed in every part of it, and dogs, cats, and fowls entered it at pleasure. Besides this it was the parlour and reception room of my host, and I was obliged to consult his convenience, and that of the numerous guests who visited us. My principal piece of furniture was a box, which served me as a dining-table, a seat while skinning birds, and as the receptacle of the birds when skinned and dried. . . . It may therefore be easily conceived that when anything bulky or out of the common way was collected, the question 'where is it to be put?' was rather a difficult one to answer."

It was on the isle of Lombok that, in the course of a conversation with the Rajah about European affairs, that that native potentate expressed great interest and curiosity in our war with Russia, which at that time was proceeding, and news of which had most curiously penetrated to even this remote portion of the globe.

I mention this particularly, because more than twenty years later a similar sort of experience is related by Mrs. Rose Innes, in her interesting though somewhat depressing book, "The Chersonese with the Gilding Off," which describes her experiences as the wife of a British official on the Malay Peninsula :—

"One of these Rajahs remarked to me one day that he would rather like to learn English, 'only,' he said, 'there is this objection to English, that it is only spoken by about a dozen people in the world, even counting the governor of Singapore and his followers; while wherever you go, to the north, south, east, or west, or beyond the wind—you find Malay spoken.' As he was rather more intelligent than the rest, and I thought it as well to let him know we were not quite so feeble a folk as he supposed, I showed him a map of the world, and pointed out the comparative sizes of the English-speaking and Malay-speaking countries. I also informed him that all the Malays in Selangor were not so many as were contained in one ordinary English town. He did not quite like this statement, and tried, I think, not to believe it. However, another day he not only asked to look at my map again, but brought a friend with him; this time they were evidently anxious to know what would be England's chances in a war with Russia, which the Malay newspaper mentioned as probable. They asked me whether it was not true that the land of Russia was much larger than the land of the English. I said, yes; but that England was more thickly populated and had a longer purse; therefore she was not in the least afraid of Russia. This argument seemed to please them."

It was while at Lombok that Wallace almost came into personal contact with that most distinctive Malay custom of "running amok," or, as we should say in plain English, "running a-muck."

The gates of the enclosure round the house were immediately shut, for fear of the man reaching the

house before he finished amok. So prevalent is this amok, that a short time before, a man in Lombok had been instantaneously killed as he stood at a gaming table, because, having lost a small sum of money over and above that which he possessed, he was going to "amok." Another, says Wallace, had killed or wounded seventeen people before he himself was killed. "It is," he continues, "the national, and therefore the honourable mode of committing suicide among the natives of Celebes, and is the fashionable way of escaping from their difficulties. . . . A man thinks himself wronged by society, he is in debt and cannot pay, he is taken for a slave, or has gambled away his wife or child into slavery, he sees no way of recovering what he has lost, and becomes desperate. He will not put up with such cruel wrongs, but will be revenged on mankind and die like a hero. He grasps his kris handle, and the next moment draws out the weapon and stabs a man to the heart. He runs on, with the bloody kris in his hand, stabbing everyone he meets. "Amok! amok!" then resounds through the streets. Spears, krisses, knives, and guns are brought out against him. He rushes madly forward, kills all he can—men, women, and children—and dies, overwhelmed by numbers, amid all the excitement of a battle."

But amok is so generally a Malay custom, and at the same time so confined in the present day to the Malays, that I cannot help dealing with this subject a little more fully. A Malay running amok is a parallel to the elephant who goes "must," for both become violently and fatally inclined without either notice or warning. There can be no doubt that, in Malay opinion, running amok is to some extent the right thing to do; and, therefore, it has become in course of time a convention. Many savage races in moments of deep feeling rend their clothes and hack themselves with knives—the Malay hacks other people. But rage or grief is not the only cause of a Malay

running amok. Instances are on record in which opium-eating or the consumption of "bang" has been the cause; the traveller Boyle has described his feelings when, in the woods with a Malay servant, he saw amok coming on him—the frantic passion stealing over his eyes apparently without any occasion whatever. Major McNair, in his "Sarong and Kris," describes an amok which took place at Singapore, in which the Malay was pursued to, and took refuge in, the canal; where, as he would not surrender, he was fired upon as he very cunningly dived to avoid the shots, and it was some time before he was wounded and secured. Sometimes, however, the maniac forces his way through the people who hem him in, and, cutting his way along the streets, escapes into the jungle.

Neither is amok confined to the lower classes; Malay princes frequently practise it. In 1878, Mansur, one of the sons of Ysuf the ruler of Perak, became suddenly excited, drew his kris and rushed off, striking right and left, killing six and severely wounding two persons, and finally made his escape into the jungle. Of the early origin of amok we cannot be quite certain, but Colonel Yule, in his "Hobson-Jobson," derives the term from a South Indian word, and claims that the Malays have imported their custom from India. The Malays themselves regard it as a temporary sort of madness, and when a man has started suddenly up from among his friends and relatives, seized his dagger, slain all within his reach, and finally been secured, his remark is: "The devil entered into me, my eyes were darkened, I did not know what I was about." But I think we can find a parallel to the Malay's amok in that voluntary madness of the heathen Norsemen which was called "Berserk's Gang." When Berserk's Gang came upon these Northern savages they would start howling like dogs, biting their shields, and behaving as if they were not only indifferent to danger but even invulnerable. The difference lies, of course, in the fact that Berserk's

Gang was often feigned with a purpose, and that men frequently obtained by assuming this state what otherwise they could not have hoped for. Fortunately, in Malaysia the amok-runner meets with a violent death; there are few cases on record as being reserved for trial.

The kris with which the Malay does such fearful execution is a weapon very well suited to his purpose. It varies in width from one to one and a half inches, and in length from fourteen to eighteen inches; its curve is not continuous but waves throughout, from the ornamented crooked hilt to the curved point. Always two-edged and very sharp, the blade—damsced with great skill—divides the flesh with its double edge in a fearful cut, the size of the wound being out of all proportion to that of the weapon. Used with determination one thrust with the kris is fatal.

While Wallace was living at Lombok he heard of the very clever way in which the Rajah of that island had counted his people, how, in fact, he had taken a census of his subjects. It would appear that the small tax of rice which was imposed as a poll-tax—a tax on every head of the population—did not bring to the Rajah the amount of rice that he expected. The village people were not oppressed, neither were they very poor, so he rightly came to the conclusion that in the course of collecting this tribute the head man of the village reserved some for himself, and that also the head man of the district did likewise. And what these lesser officials did, so did the higher officers of the state—the Gustis or princes. And when the Rajah observed how wealthy these princes were becoming, and how handsome were their houses, their clothes and their krisses, he felt quite sure that they were amassing their wealth by taking an improper commission off the rice as it passed through their hands. So the Rajah set to work to prove it. And for about a week he worked hard at the problem, but

at the end of that time he had found a solution. And then he called his princes and great men together, and told them how during the past week he had been troubled, and that in the previous night the great spirit of the fire-mountain (for Lombok has its volcano) appeared to him in a dream, and said that he must go up to the top of that mountain. So with great state, and after much bustle of preparation, the Rajah proceeded along newly-made roads, and across newly-spanned bridges to the base of the mountain, accompanied by a great host of officials. And then he climbed the mountain with a chosen escort of priests and princes, and when near the summit he advanced alone to meet the great spirit. After an absence of some hours he returned, looking grave and as if charged with a most important message. And a few days afterwards all the great men, and many of the people, were summoned to hear what the spirit had said to the Rajah, and it was this: That plagues and sickness were coming on the earth, and that if the people of Lombok wished to escape them, they were to hearken to the words he had spoken to the Rajah. And these words were that he should make twelve sacred krisses, and that these krisses should be forged out of needles, the needles to be provided by the villages and districts, every man, woman, and child to provide one needle. And when the sickness came, one of these krisses should be sent into the village where it was, and if the right number of needles had been sent, then the sickness would cease; but if not, the sacred kris would not avail, and the plague would not be stayed.

Quite unsuspectingly the head men started off to proclaim the message of the spirit, and in their anxiety to escape the expected pestilence took every care to have the right number of needles collected. And when the bundles had all come in and been counted, the Rajah had twelve krisses made of them.

Now the time of harvest came and passed, and the

tax of rice was collected, and in due time brought to the Rajah. But many of the princes, and the head men of the districts, and the head men of the villages, had forgotten the matter of the needles, or had not realised what it really meant, and brought up not nearly as much rice as they should have done. Had they not large houses to maintain and beautify? Had they not silk and embroideries to buy? And did not the ivory handles of their krisses need setting about with precious stones, or even replacing with solid golden hilts? So the rice was kept back as before, and the Rajah's tax was no larger than it had been in the former years. But when their rice had been weighed, the Rajah spoke to them in words something like these:—

“The rice you have brought me is only according to so many heads in your districts, but the needles which were collected tell me that there were twice as many heads there. Go and find out who has not paid his tax, that he may be punished.”

And this is how the Rajah not only knew how many subjects he ruled over, but also how he so increased his tribute and waxed in wealth, that he became one of the richest of all the Rajahs among the Malays. And when sickness came, a sacred kris was sent to the village where it appeared, and if the sickness ceased then the people gave honour and glory to their Rajah. But if the kris did not prevail against the sickness, then the people knew that some one had lied, and that the right number of needles had not been collected. And all this wonderful story is, I think, very creditable to the ingenuity of the Rajah, and he fully deserved all the additional riches that he obtained by the clever trick he played the unjust stewards.

Wallace was not favourably impressed with the Timor group of islands, and he has placed on record the abominable government of the Portuguese in the eastern part of Timor. This is now the only remaining Portuguese settlement in the whole archipelago. The

Portuguese capital is Delli—a wretchedly poor little settlement, heavily handicapped by an abominable climate. The houses, church, and official buildings in Wallace's time were built of mud and thatch; the officials strutted about in resplendent uniforms; and their morals and management were of the lowest type. Mr. H. O. Forbes, who has of late years established for himself an excellent reputation as an original observer and explorer in the Malay Archipelago, has to a great extent recently confirmed Wallace's experience. But one is glad to hear from him that more



PAPUANS.

energy is now shown by the government, and that in other matters a slight improvement has taken place.

The great "find" of Wallace in Timor was his discovery that the natives were a wholly different race to the Malays—that they were, in fact, Papuans. These people are tall and well built while the Malays are very short; their hair is extremely frizzly while that of the Malays is straight; their noses are large and often aquiline, while those of the Malays are small, sunken and tip-tilted. The colour of the Malay skin is either reddish-brown or yellowish-brown; that of the Papuans is sooty brown and often nearly black. The face of the Malay is usually bare, or the beard is at least, extremely scanty; on the other hand, the

Papuans grow beards with ease, which are as thick and frizzly as their hair. Just as in some respects the Papuan more closely resembles the negro in his personal appearance, so in his moral character, his manners and customs, is he more closely allied to the African. The Malays are silent and undemonstrative :



MALAYAN HUNTER.

the Papuans are noisy, and show their feelings in shouts and laughter and the wildest contortions. Intellectually, however, the Papuan has a slight advantage, and æsthetically he is much the superior. His house, canoe, his bamboo water-pots, his pipe, and nearly everything he possesses are elaborately carved ; the Malay, on the other hand, rarely exercises this craft. But, morally, the Papuan is inferior to the Malay : the gentle affection which the latter displays to his rela-

tives is absent in the Papuan ; and while the Malay child may have "a good home," as we say, the lot of the young Papuan is by no means a happy one.

The Timor group of islands—which comprises Timor, Flores, Sumbawa, Lombok and some other smaller isles—are included in the Austro-Malaysian zoographical group, though Wallace found many exceptions and

difficulties in Timor itself. Dr. Guillemard, however, in his wholly admirable "Cruise of the *Marchesa*," aptly describes the characteristics of the vegetation of the group, taking Sumbawa as his text. "However well one may be acquainted," he says, "with the facts of regional division, and with the zoological and other characteristics of the various parts of the Malay Archipelago which have been so admirably described by Mr. Wallace, the personal realisation of them gives an amount of pleasure to a naturalist which few people can imagine. Java was the last country we had visited, but here the vegetation was of quite a different type. Euphorbias of two or three species were abundant, and it was scarcely possible to enter the dry and scrubby jungle without being brought constantly to a standstill by the thorns. In the Malayan jungle the rattan is almost the sole impediment of this kind. The forest trees were unfamiliar, and owing to the leaflessness of many of them there was a remarkable absence of colour in the landscape. Here and there only a bombax caught the eye, its crimson flowers conspicuous at the ends of the bare branches. The prickly pear was growing everywhere, and to judge from its abundance must have been introduced into the island many years ago. No rain had fallen for five months, and the heat and dust were intolerable. The latter lay thick upon the trees and plants, and enveloped us in a light impalpable cloud as we walked. Our surroundings were indeed different to the eternal verdure of a Bornean forest."

Most people who have glanced at a map of the Malay Archipelago must have been attracted by the remarkable shape of Celebes. It has a central nucleus and four arms of varying length, but uniformly traversed by a mountain range. It might well be likened to a capital R, with the right hand curve of the upper part displaced and curled away on a rough level with the top of the letter. Professor Meiklejohn has pointed out that it resembles a capital K, but

this would not provide for the longest, and perhaps the most important, and certainly the second most important arm. Celebes is rather larger than England, and Macassar, its chief port, situated near the extremity of the southern peninsula, is one of the most important trading centres of the archipelago. Menado, in the extreme north-east, is the capital of northern Celebes, and has probably a great future before it. Cotton, edible birds' nests, tortoise-shell, sago, and tobacco form the chief articles of commerce.

Mr. Wallace was journeying about Celebes for three months in 1856, five months in 1857, and three months in 1859. He has, therefore, much to say about this extremely interesting island, and I can only suggest in these pages an insignificant fraction of what he saw and did. He was very kindly treated both by the Dutch and native Rajahs, and he was thus enabled to explore pretty thoroughly many prolific districts, and make valuable captures. In the course of one of these excursions he obtained some specimens of that largest and handsomest of butterflies the Ornithoptera. Wallace tells us that he trembled with excitement when he took the first one out of his net and found it to be in perfect condition. When he returned at night he carefully placed his specimens in a box, and hung it up by a string. While in the act of skinning some birds he had shot, he looked up at the box which contained his precious capture, and saw a long line of small red ants descending the string, and making for the butterflies in the box. A moment's inspection revealed to him the unpleasant fact that they had already begun to work upon the butterflies; but it occupied him more than an hour to remove each insect, clean the butterflies thoroughly as well as the box, and then put all trim and safe again.

Wallace was now living in a village where only a few people could speak the merest smattering of Malay, and none of them had probably seen a European before. Wallace writes: "I excited terror alike

in man and beast. Wherever I went, dogs barked, children screamed, women ran away, and men stared as though I were some strange and terrible cannibal monster. Even the pack horses on the roads and paths would start aside when I appeared, and rush into the jungle; and as to those horrid, ugly brutes, the buffaloes, they could never be approached by me; not for fear of my own but of others' safety. They would first stick out their necks and stare at me, and then on a nearer view break loose from their halters or tethers, and rush away helter skelter as if a demon were after them, without any regard for what might be in their way. Whenever I met buffaloes carrying packs along a pathway, or being driven home to the village, I had to turn aside into the jungle and hide myself till they had passed, to avoid a catastrophe which would increase the dislike with which I was already regarded. Every day, about noon, the buffaloes were brought into the village and were tethered in the shade around the houses; and then I had to creep about like a thief by back ways, for no one could tell what mischief they might do to children and houses were I to walk among them. If I came suddenly upon a well where women were drawing water, or children bathing, a sudden flight was the certain result; which things occurring day after day, were very unpleasant."

On his second visit to Celebes he visited the district watered by the Maros river, and in the midst of the forest had a small house built for him. He was in the centre of a land of butterflies, many of them unknown in any other part of the world, and not a few of them measuring as many as eight inches across the wings. Wallace was fortunate in his captures, and seems to have enjoyed his residence there exceedingly. He tells us that frequently, as he sat drinking his early coffee at sunrise, rare birds would perch on a neighbouring tree, and he would rush out in his slippers, and, if successful, secure a splendid prize.

The famous horn-bills of Celebes would loudly flap their way before his verandah, and the black baboons would chatter among themselves their criticisms on the intruder. A quarter of an hour spent at sunrise and sunset in poking about the fallen trees, would often give him as many beetles as he could find in a day's roaming, and any moment that he could spare from his work of skinning and preserving was always well spent in a sally into the surrounding forest.

Penetrating inland to the falls of the Maros river, he reached a country of precipices and chasms. There seemed to be no surface even which sloped ; on every hand rose great masses of rock walls, and between them loomed dark gorges. Covering the whole as with a carpet was a luxuriant tropical vegetation : ferns and creepers, shrubs, and even trees, so intertwined and matted together as to form a tapestry woven in Nature's loom. And here Wallace was led to write one of the most famous passages of his famous work—a passage which I would that I could quote in full. Here, however, are a few sentences :—

“The reader who is familiar with tropical nature only through the medium of books and botanical gardens, will picture to himself in such a spot many other natural beauties. He will think that I have unaccountably forgotten to mention the brilliant flowers, which, in gorgeous masses of crimson, gold, or azure, must spangle these verdant precipices, hang over the cascade, and adorn the margin of the mountain stream. But what is the reality ? In vain did I gaze over these vast walls of verdure, among the pendent creeper and bushy shrubs, all around the cascade, on the river's bank, or in the deep caverns and gloomy fissures—not one single spot of bright colour could be seen ; not one single tree, or bush, or creeper bore a flower sufficiently conspicuous to form an object in the landscape. In every direction the eye rested on green foliage and mottled rock. . . . How is it, then, that the descriptions of travellers

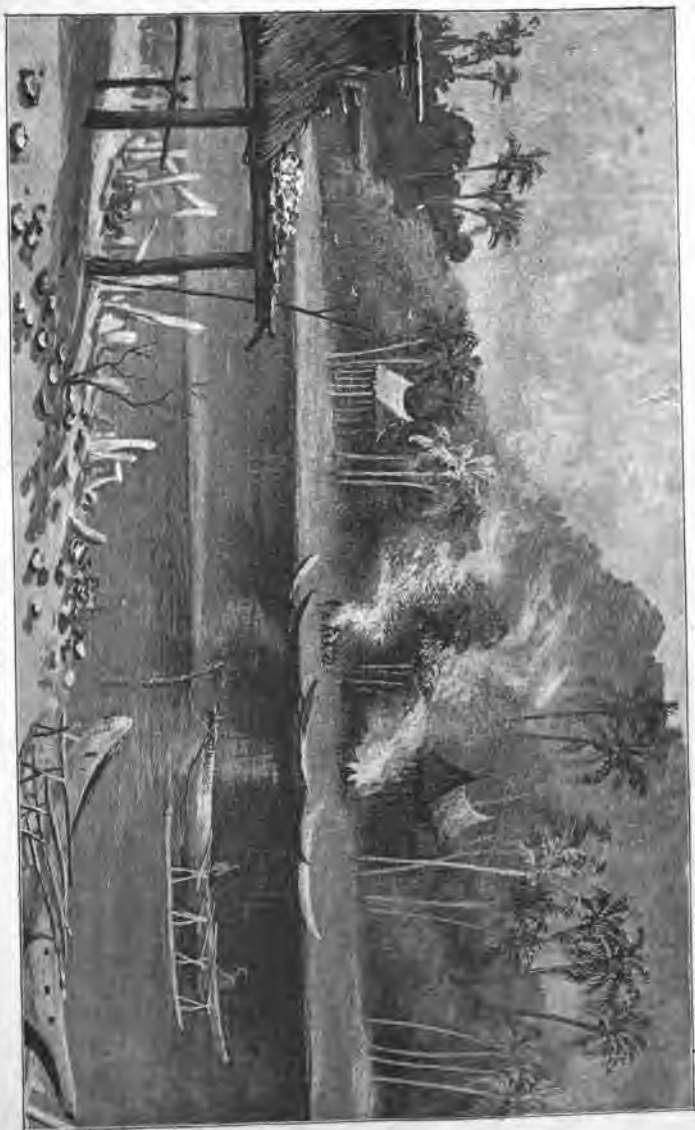
generally give a very different idea? And where, it may be asked, are the glorious flowers that we know do exist in the tropics? These questions can be easily answered. The fine tropical flowering-plants cultivated in our hot-houses have been culled from the most varied regions, and therefore give a most erroneous idea of their abundance in any one region. Most of them are very rare, and thus extremely local, while a considerable number inhabit the more arid regions of Africa and India, in which tropical vegetation does not exhibit itself in its usual luxuriance. Fine and varied foliage, rather than gay flowers, is more characteristic of those parts where tropical vegetation attains its highest development, and in such districts each kind of flower seldom lasts in perfection more than a few weeks, or sometimes a few days. In every locality a lengthened residence will show an abundance of magnificent and gaily blossomed plants, but they have to be sought for, and are rarely at any one time or place so abundant as to form a perceptible feature in the landscape. . . . During twelve years spent among the grandest tropical vegetation, I have seen nothing comparable to the effect produced on our landscapes by gorse, broom, heather, wild hyacinths, hawthorn, purple orchises, and buttercups."

In his third visit to Celebes, Wallace stayed in the north-eastern part of the island, which is known by the pretty name of Minahasa. In many respects Minahasa is the most interesting part of Celebes; it has been for a considerable time colonised by the Dutch in their own wise way, and the people who were at one time head-hunters, and possibly even cannibals, were rapidly civilised by so apparently simple a matter as the introduction of the coffee plant. The village chiefs were one by one prevailed upon to cultivate it, and the Dutch sent instructors as well as seed from Java. The Dutch Government, too, kept the natives in food while they cleared and planted, and then bought all the coffee produced at a fixed price. As the village

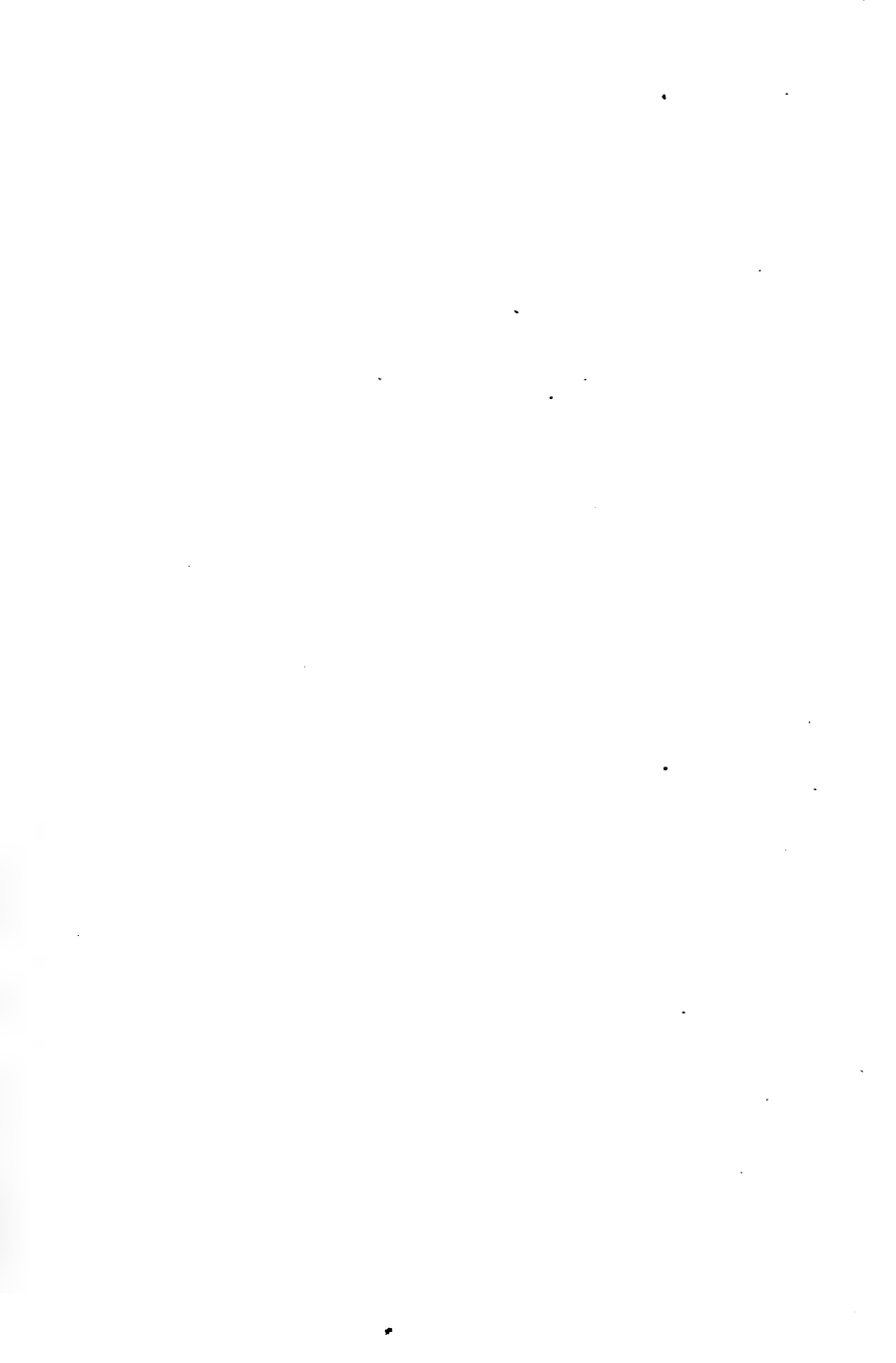
chiefs received a commission on this produce, the labourers were kept well up to the mark, and gradually the industry spread all over the higher parts of Minahasa. Roads were made, and paths cleared; schools were built and churches founded, and the Chinese set up their shops all over the country, to sell clothing and luxuries in return for the wages of the Dutch Government. Dr. Guillemard, in his recent visit to Minahasa, stayed in the cottage of one of the village chiefs in these districts, and he mentions that the sitting-room was painted white, that the windows were draped with white muslin curtains, and that among the articles of furniture were two sofas, a round table on which were some books, a musical box, and a duplex lamp.

Three visits, also, did Wallace pay at different times to the island of Banda, which may be called the nutmeg garden of the world, or, at any rate, it is the chief nutmeg garden. Being highly volcanic the soil is extremely fertile, and almost the entire surface of the island is planted with nutmegs—trees which reach some twenty or thirty feet in height, have glossy leaves, yellowish flowers, and an oval fruit about the size and colour of a peach. When this is cut open the rich brown coloured nut is revealed, wrapped in its crimson mace. Inside the shell is what is really the seed, but which is the nutmeg as known to us.

Passing to the island of Amboyna, he devoted some time to the study of the remarkable marine products of that island, and he has pointed out that there are few spots in the world as rich in corals and shells as the harbour of Amboyna. The water is marvellously clear, and consequently one is enabled to look down upon the forms of life in the deep waters below. Over the entire bed of the sea, corals and sponges and actiniæ are spread in that profusion which nature lavishes in these climes; their variety of form and their beautiful hues are only excelled by the large size to which they grow. And there dwells in this



A NEW GUINEA HARBOUR.



beautiful submarine world a vast population of the most gorgeously coloured fishes—blue, red, yellow, spotted, banded, striped—and round about, like clouds at sunset, float huge orange or rose-coloured medusæ. The writings of travellers do not usually err on the side of forbearance, but there exists no description in the whole literature of travel which can create the impression that five minutes of actual observation can produce. There are few sights as beautiful, and none more calculated to call forth the admiration of man, than the living, glowing wonders of a coral sea.

While staying in Amboyna, Wallace had a curious experience with a snake. The house in which he lived was a bamboo hut of the simplest character. It consisted of one small, dark room, which did duty for a bedroom, and formed a cool retreat when the sun was high; and a wide verandah, which served for dining-room, sitting-room, and workshop in one. It happened one evening that he heard a curious rustling noise in the thick thatch above his head, but as the noise suddenly ceased, and as birds and bats and all manner of large insects frequented the thatch roofs, he took little notice of the matter and went to bed unconcernedly. But the next afternoon, when lying reading on his bed, he chanced to look up, and saw a great mass of black and yellow above his head. For a moment he imagined it to be a tortoise-shell which had been stowed away there; but the next instant he recognised the folds, and in their midst the head and the glittering eyes of a python. It was a large python—perfectly capable of swallowing a child, and of seriously injuring a man—which had been his companion throughout the preceding night! It had evidently climbed up one of the supporting posts of the verandah roof, crawled along the beams, and thus ensconced itself in a quiet sleeping-place not four feet above his head.

On summoning his servants they were too frightened to do anything but raise the clamour which anyone who knows what coloured servants are will readily

understand. However, there happened to be a Bouru man among the labourers engaged on a neighbouring plantation, and this man, who in his native country had been used to capturing large snakes, undertook to remove the unbidden guest. Making a noose of rattan cane, he managed to slip it over the python's neck, and thus drag it down from its perch; then, with wonderful pluck, he seized hold of the tail, and by sheer force dragged the reptile out of the house, notwithstanding its desperate resistance. The snake would coil now round a chair and now round a post, and for a while make a short stand, but in the end it was pulled right out of the house, and the man, running at full speed and swinging the large beast, brought its head violently against a tree and stunned it. It was then quickly despatched with an axe. On measuring this python it was found to be twelve feet in length, and of unusually large girth.

I must pass over many of the islands which Wallace visited, and in which he made discoveries in nature as remarkable as they were numerous, and give a short account of his discoveries in the vast island of New Guinea, an island which is ten times the size of Scotland, three times the size of Great Britain, and more than three hundred thousand square miles in extent. It has the loftiest mountains to be found between the Himalayas and the Andes, and its vegetation is perhaps the most luxuriant in the world. It is the land of the Bird-of-Paradise; its forests are the homes of the most beautiful orchids; and its lagoons the forcing houses of fever. The western half of New Guinea is Dutch: and the eastern portion is divided, the north by the Germans, the south—facing Australia—by the British. When we consider the ethnological character of its natives, the boundless fertility of its soil, and the magnificent prospect which it has before it, the future of New Guinea must be one of the highest importance; and therefore, before noting Wallace's discoveries at

its western end, I shall give the briefest *résumé* of its past.

The ancient rivalry between Spanish and Portuguese navigators in their search for the spice islands of the East, led to the discovery of New Guinea in 1526, by Meneses, a Portuguese commander. Here he found a woolly-haired people, black but not uncomely, whom the natives of the Moluccas called Papuas: their land was then called Papua. Other navigators subsequently touched at various points of the island, none, however, guessing at its great size ;



and the Spaniard Retes, in 1545, sailed for some hundreds of miles along its coast, and gave it the name of New Guinea, because the dark woolly-haired Papuans—so unlike the Malays—reminded him of the people he had previously seen on the coast of Guinea, in Africa. With the sixteenth century expired the supremacy of the Portuguese in the Malay Archipelago. Upon the ruins of their power rose the great colonial empire of the Dutch; and to the Dutch we owe that persistent navigation of the waters of New Guinea which at last revealed its shape and extent. Tasman and Vinck, Keyts and Kolff, did most of the work, and the last-named brings the discoveries down to the

present century. But it must be remembered that the Englishmen Dampier, Carteret, Cook, and Forrest also set their mark upon the history of New Guinea exploration. The last-named landed and stayed for several weeks at Dorey. In 1791, too, Lieutenant McCluer explored and surveyed the deep gulf which bears his name. On returning to the Pelew Islands he decided to cast in his lot with the islanders, and gave up his command to the officer next in rank ; but rather over a year later, embarking on another voyage in the archipelago, he was lost ; at any rate, neither he nor the ship was ever heard of again.

The Dutch acquired western New Guinea by the right of discovery, by the allegiance of the native chiefs, by a formal act of possession, and by constant trade with the people and development of their industries. In their hands we may be quite sure this development will continue to increase. The Germans and British presented themselves to their respective portions by right of a convention, signed in 1885 ; but it is only fair to point out that both Germans and British had been extremely active in the exploration of these portions, and that both have exercised their influence for the undoubted good of the country and its people. Quite recently, the British Governor, Sir William MacGregor, has ascended several of the highest peaks of the magnificent Owen Stanley Range. Of modern British travellers I would mention Wallace, Admiral Moresby, the missionaries Lawes and Chalmers, and the naturalists Forbes and Powell.

It was on April 11th, 1858, that Wallace landed at Dorey, on the north coast of Guinea, and on the western arm of Geelvink Bay. In Dorey he found a new kind of town. Every house stood in the water, and each had its own bridge and series of platforms connecting it with the rest of the town. Their build is wretched—loose sticks irregularly laid being the main material. They are supplemented by old mats, palm leaves, and any bit of wood that comes handy

to the builder. As an ornamental frieze below the eaves, hang—or used to hang—the skulls of their enemies, the savage Arfaks who dwell in the interior. The council house of the town is built more strongly, and abounds with carvings of the most grotesque and extraordinary character. We learn, on Wallace's authority, that the famous picture of an ancient lake-dwellers' village, which appeared in Sir Charles Lyell's "Antiquity of Man," was made up from sketches of Dorey, although the regularity and smoothness evident in the copy are not to be found in the original.

No sooner had he landed than Wallace began to build a house for himself. The chief difficulty lay in the Papuan labourers, who did not know Malay, and to whom everything had to be explained by dumb-show. However, what with using a profusion of mats for walls and roof, the matter was soon got over, and Wallace found himself "fairly established as the only European inhabitant of the vast island of New Guinea."

After some time spent in collecting, Wallace wounded his leg while forcing his way through the forest, and, as so often happens in the tropics, this turned to a really serious affair. With constant care, however, he managed to get out of his house after a month's delay. Within a mile of this house he collected, in less than three months, over a thousand species of Coleoptera; but it was not Coleoptera, so much, that he was after. The Bird-of-Paradise was the chief object of his search; but he was doomed to be disappointed—owing partly to the rainy season, and also to the fact that they are not to be found in the vicinity of Dorey—and accordingly he moved on to Waigiou, where he soon secured a magnificent specimen of the Red Bird-of-Paradise. As this was the last of the fine species that he secured, and as in all he obtained many magnificent varieties, it will aptly close this chapter if I give a brief description of his chief captures.

As a rule the Birds-of-Paradise are quite small, and, though allied to starlings and to the Australian honey-suckers, are distinguished by the most marvellous plumage. In some species the feathers of the tail are lengthened into wires; in others the tails are curved round into the most remarkable forms; in others, beautifully coloured feathers spring from the body and form fans or "trains"; in others, again, the long plumes grow from the head, the back or the shoulders. The Malays call them "manuk dewata," or God's birds; the Portuguese "*Passaros de Sol*," or birds of the sun; and the Dutchmen gave them the name by which they are now called. Wallace was the first Englishman to observe them in their native haunts, and to him we are indebted for the first scientific and accurate account of them.

The most important of these birds is the Great Bird-of-Paradise, which is the largest species known. From the tip of the beak to the tip of the tail it measures as much as seventeen or eighteen inches. In body, wings, and tail it is a rich brown; the breast a brownish purple, the head and neck a very pale yellow of velvety appearance; the lower part of the throat is of an emerald green of a magnificent metallic gloss, the beak is of a dull light blue, and the feet pale grey pink. The two middle feathers of the tail extend from two to nearly three feet in length, having the appearance of curved wires. But the great attraction of this bird is the thick masses of most magnificent golden feathers which spring from each side of the body below the wings, and which are often as long as twenty-four inches. These side plumes, as indeed all the rich colouring of the birds-of-paradise, belong only to the males. The Great Bird-of-Paradise is for ever flitting through the grand tropical forests which form its home. Frequently, too, as many as twenty of these magnificent male birds will assemble on one tree, and boasting in their beauty, as it were, lift their wings, crane their necks, and vibrate their golden

plumes with the greatest rapidity. These great yellow fans they raise up and expand until the whole bird is overshadowed by them. All that one can see is the yellow head and gorgeous green throat backed by the darker body, crouching, as it were, below the waving golden glory vibrating above.

In the Aru Islands the natives obtain this species without much difficulty. They wait until they have found the trees on which these birds love to assemble,



GREAT BIRD-OF-PARADISE.

and then they build a small platform of palm leaves among its lower branches, under which the hunter crouches. Before daybreak the hunter crawls to this hiding-place, armed with his bow and a sheaf of blunted arrows. At sunrise, appropriately enough, these birds of light and beauty assemble on the trees, and then the hunter, shooting his blunt arrow, effectually stuns his game, which falls to the ground senseless. It is then secured and killed by a lad who is hiding in ambush below, not one drop of blood having been shed to injure the plumage.

The Lesser Bird-of-Paradise is a most exquisite

rarity. Smaller than the Great Bird, it is not unlike it; its back, however, is yellow, and the great side plumes are of a very light golden colour. Wallace captured one at Dorey, and when returning home in 1862 he bought a couple of males at Singapore, giving £100 for the pair. Though they experienced many cold winds on their voyage home, and cockroaches—their favourite food—were scarce, they arrived safely in London, and lived in the Zoological Gardens for a space of two years. This may be taken as a fair proof that they are a hardy species.

The Red Bird-of-Paradise differs chiefly from the others by having its side plumes of the richest crimson; they are also somewhat shorter, and less gracefully curved. The middle tail feathers, which are about twenty-two inches long, make a double curve, first inwards and then outwards. Most of the head is of a rich shot, or metallic green, and the bill is a deep reddish-yellow. This Red Bird-of-Paradise Wallace believes to be entirely confined to the small island of Waigiou, but Dr. Guillemard, who was in this archipelago in 1883, also found the species on the island of Batanta, about thirty miles to the south.

Then there is the King Bird-of-Paradise, which differs greatly from the three former. In length some six inches, it possesses a plumage of the most lustrous brilliancy. A crimson sheen floods head, throat and back; a soft silky white spreads over breast and belly, and is divided from the crimson of the throat by a deep bar of shot emerald. The tuft that springs from each side of the body, and which, in the former species, formed so distinct a feature, is in this bird extremely short, ashen grey in colour, and edged by a deep border of emerald green, itself divided from the grey by a thin line of buff. The middle tail feathers are mere wires, but curl up at the end into two shell-like webs of the brightest green.

The Magnificent Bird-of-Paradise is distinguished from the preceding by a feather mantle which falls

from the neck over its back, and when occasion serves can be raised into a magnificent ruff. Under this mantle, which is of a pale yellow, is a second one which protrudes slightly beyond it, and is of a reddish colour. The back and wings are orange, the former being rather dark and the latter light. The tail feathers curve round so sharply as to almost form two complete O's. But larger than the Magnificent Bird-of-Paradise is the Superb Bird; moreover, it is the rarest and most brilliant of the group. Wallace describes the ground colour of the plumage as an intense black, but with beautiful bronze reflections on the upper part; the head is covered with feathers of a most brilliant green and shot blue, and from the back of the neck springs a large shield of the richest purple and bronze-black colour. This shield is repeated on the breast by a smaller one of a bluish-green colour, glossy as satin, and widening towards the sides. When the bird raises the larger shield above its head its whole appearance is of course instantaneously changed.

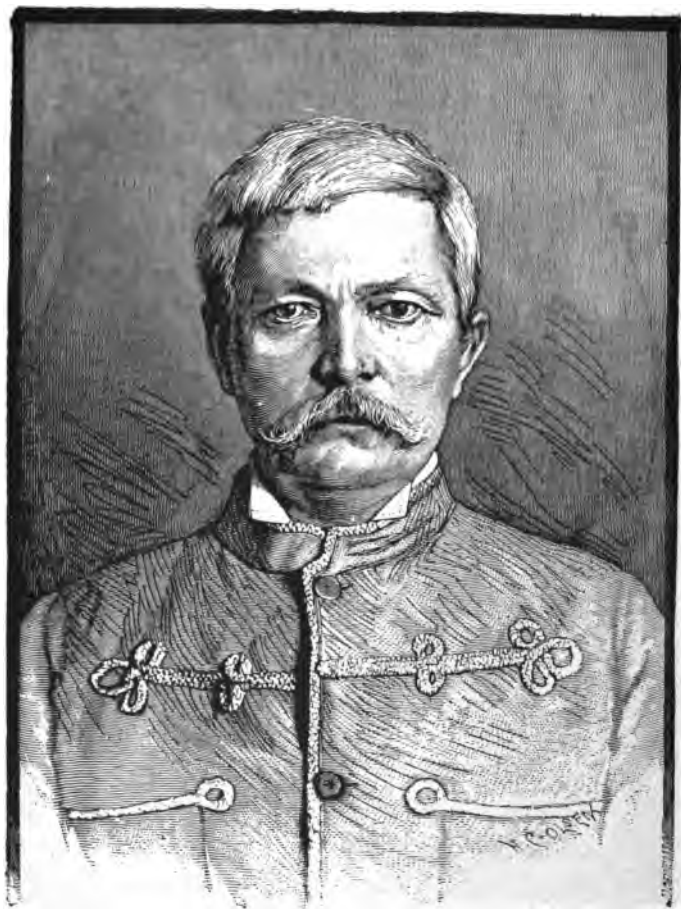
Then there is the Golden, or Six Shafted Paradise-bird, which is characterised by the six long feathers which spring from its head, and which are tufted at the ends. The throat and breast are golden in colour, but in certain lights are shot with green and blue tints. And there is the Twelve-Wired Bird-of-Paradise, which has, as its name implies, twelve wire-like shafts—of a rich golden yellow—extending beyond and curling up from the equally golden side-plumes.

Although there are many species of this gorgeous family of birds, I will only describe one other, that which has been named after its discoverer, *Sennoptera Wallacei*. This bird, which also possesses the common name of the standard-wing, was discovered by Mr. Wallace in the island of Batchian, and its characteristic feature is a pair of very long pure white feathers, which spring from the body near the wing, and can be raised or lowered as the bird pleases. The breast,

throat, and neck are shot with blue and green; the crown of the head is of a pale violet of metallic character, and the general colour of the back is a bronzed olive. As is the case with the majority of Paradise-birds, it is continually flying from tree to tree, erecting its long white feathers and spreading out the blue-green shields which protect its breast.

With this sketch of perhaps the most beautiful objects of animated nature to be found on the whole globe, and which Mr. Wallace was the first among English naturalists to follow to their haunts in the depths of the tropical forests, I will bring this brief account of his eight years' wanderings in the Malay Archipelago to a close. Unlike, perhaps, those other travellers included in this book, his journeys were devoted to the study of nature in detail rather than the encompassing of vast distances of unexplored wilds. But when one considers that he travelled some fourteen thousand miles in the Malay Archipelago alone, that he dwelt for many months at a time among races not yet emerged from a savage condition, and that he brought back with him no fewer than one hundred and twenty-five thousand beautifully preserved specimens of natural history, I do not think that any one can for a moment believe his wanderings in lands, many of which were practically unknown, unworthy of being included in a volume devoted to the most famous journeys of modern explorers.

STANLEY'S DESCENT OF THE
CONGO.



H. M. STANLEY.

STANLEY'S DESCENT OF THE CONGO.

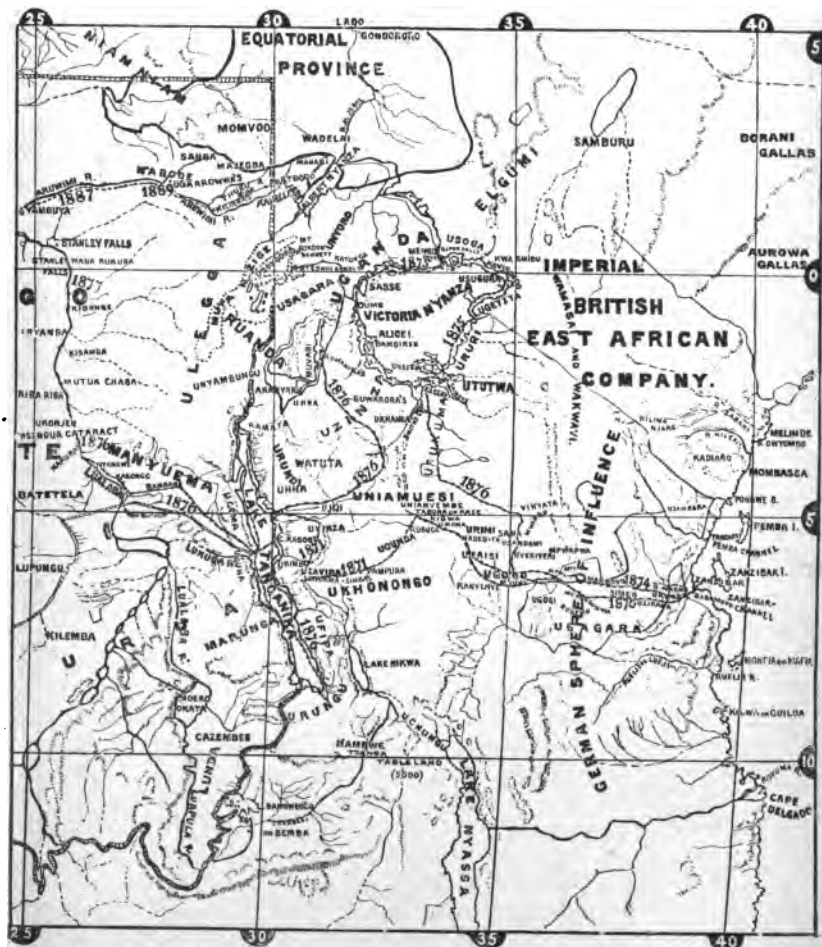
1876—1877.

THE Congo has now for many years been a name to conjure with. It delivered up the secret of its history years after the mysterious Nile had been bared to her very fountain head; but it was not until many had sought and failed to find. Naturally enough, the mouth of the Congo was known first; indeed it is more than four hundred years since the Portuguese explored the lower reaches and founded a province which, in the course of two centuries, rose to be a great colonial empire, and of which, at the present time, it is difficult to find a trace. Early in the present century Englishmen began to probe the dark parts of Western Africa, if haply some good should be the outcome. In 1816-17 the Congo Expedition, under Captain Tuckey, ascended the river for one hundred and seventy miles, and gave us a fairly accurate account of this stretch of it; but the Yellala Falls proved insuperable, and, not liking the look of the country on either side, the expedition returned. "Tuckey's Farthest" became an historic point, and beyond it none had penetrated up to the time when Stanley came down the river from Nyangwe—the greatest feat he ever performed—and, passing "Tuckey's Farthest," emerged on the west coast at Boma. He was the first to navigate

the Congo from the far interior of the continent to the open sea.

The Congo, briefly, rises as the Chambesi in the high country south of Lake Tanganyika, at an elevation of some five thousand feet, and runs south-west into that great "sponge" Lake Bangweolo. This lake is very shallow, and its area is always varying with the alternation of seasons. The adjacent low country frequently becomes a vast bog, and its vegetation is composed of rank grass and large reeds. Running out of the west side of this "sponge," the Congo, under the name of the Luapala, follows a northerly course to Lake Moero, which it traverses from end to end. Leaving Moero as the Luvua, it flows north-west into Lake Lanji, a body of water which is more properly a lagoon; here it is joined by the Lualaba, which follows a north-easterly course through the Kasongo country. In this lagoon, also, its waters are swollen by those of the interesting river Lukuga, the only stream which drains Lake Tanganyika. Issuing from Lanji it keeps a new course, and is soon joined by the Luama, through the basin of which Stanley travelled to the Tanganyika, and very shortly afterwards the important Arab settlement of Nyangwe is reached. From Lake Lanji to Nyangwe the river is known as the Lualaba. From this point, however, to its final debouch into the Atlantic Ocean it bears the name of the Congo. The river, which has been slowly spreading out to a great width, now begins to decrease somewhat in width and to run with accelerated pace. The angle of the main slope is more acute, and a series of falls and rapids bring us to the well-known "Stanley Falls." Below the falls the Congo rapidly widens out again, and soon receives on its right bank the Aruwihimi, a tributary which has become famous in African history and geography from the remarkable adventures and episodes connected with the Emin Relief Expedition, which followed its valley to within a few miles of the Albert Nyanza.

For a thousand miles from Stanley Falls the river makes a great curve, passing north of the Equator, and cutting the Line the second time as it turns south-west. A little south of the Equator it receives what is its most important affluent, the Mobangi. This river rises in the country immediately west of Emin's old province, and is identical with the well-known Welle, of Schweinfürth. Soon afterwards it is joined, on the left bank, by the Kwa, whose waters are drawn through an innumerable number of tributaries which traverse Lunda, far south; of these, the Kasai, well known to us through Wissmann's explorations, is the most important. About one hundred and fifty miles further the broad and placid stream of the Congo, which has been flowing through an immensely fertile and densely peopled region for a thousand miles, opens into Stanley Pool, where its upper course comes to an end. From Stanley Pool the Lower Congo leaps and rushes by a series of fall and rapids, through wild gorges, and under beetling cliffs—a series of cataracts which Stanley named the "Livingstone Falls"—as far as Vivi. From here it again widens, and for over a hundred miles becomes an ever expanding estuary, in whose yellow waters a fleet of trading vessels may always now be found. The entire length of the Congo is about three thousand miles, and the area of its basin has been estimated as high as a million and a-half square miles. The waters that are navigable within this basin are considered to amount to about fourteen thousand miles in all, but some thousands of these miles have not yet been explored. At any rate, there is no region in Equatorial Africa which for drainage, navigable waters, fertility of soil and abundance of vegetable wealth, can for a moment compare with the basin of the Congo; and the voyage in which Stanley discovered its great size and importance is remarkable, not only for the fearful difficulties encountered and the heroic endeavour displayed, but also for the fact that it was the direct cause of the

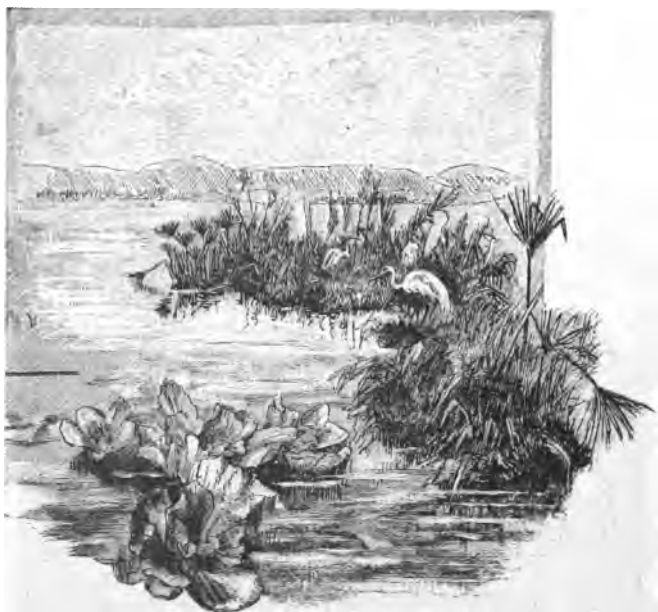


INDICATED BY CHAIN LINES.

foundation of that great free-trading state which Stanley afterwards built along the Congo banks, and which his successors are now extending throughout its basin—a state that will before long be reaping the incalculable vegetable wealth of the interior, and exhibiting, if wisely guided, how best the white man can deal with the enormously difficult problem of bringing civilisation to the black. And this question is of higher moment than usual, as there is no considerable area in the whole basin of this mighty river which can be colonised by the European. Native labour is all-important; but if this labour is to be available in the basin of the Congo, the slave-traders must be rigorously repelled, and the enslaving vice of drunkenness must be repressed. But I am now wandering into those bitter paths of controversy which are unusually frequent in connection with the Congo Free State; I will therefore return to that moment when Stanley was still standing at the threshold of all these great discoveries, and about to fight his way down the Congo.

But how came Stanley to the Tanganyika and, passing thence through Manyuema, to the Congo? In this way. The death of Livingstone at Chitambos' village, in the dreary wastes south of Bangweolo, the subsequent bringing of his embalmed body to the coast—by faithful native servants who had carried it more than a thousand miles, through obstacles innumerable, and during nearly the whole of an anxious year—and the impressive burial of the great traveller's remains in Westminster Abbey, brought public interest to bear upon the Africa for which Livingstone died with no common intensity. In the midst of the new enthusiasm, Stanley was commissioned by the proprietors of the *New York Herald* and the *Daily Telegraph* to conduct an expedition into Central Africa. His commission was a roving one, but there were three things which he had particularly to attempt. The first was to so travel in the Lake Region—in the basin of the Nyanzas—as to clear up the greater mysteries relating

to them and the ultimate sources of the Nile ; the second was to investigate the slave-trade, and calculate, as far as possible, the extent of its operations ; and the third was to strike the course of that river about whose head-waters Livingstone had wandered during the last years of his life, and to follow it wheresoever it might lead. It was a great task—a task of explora-



ON THE CONGO.

tion, a service to humanity, a heralding of civilisation ; appropriately enough, the two great English-speaking peoples joined, as it were, to speed this message to a Dark Continent. And Stanley, with money and influence to back him, started once more at the head of a large native following—not to find the lost, but to lay bare the unknown.

He left England in August 1874, and, arriving at Zanzibar in September, started for the interior in November. He reached the Victoria Nyanza in the following February, and then proceeded, almost alone, to circumnavigate the lake. In the course of this voyage he paid a first visit to Uganda; and when he subsequently brought his expedition to that country he so influenced M'tesa, the then reigning king, that that potentate begged Stanley to send him white men



TRADING CANOE ON THE CONGO.

to teach Christianity to his people. This led to Stanley's writing that letter which appeared in the *Daily Telegraph* of November 15th, 1875, and which was the immediate cause of the Uganda Mission. From Uganda the expedition moved west to the Muta Nzigé. But Stanley was prevented from exploring it by the cowardice of his Uganda escort; thence, therefore, he returned to Uganda, and travelling through the country west of the Nyanza, arrived at Ujiji in May 1876. He then circumnavigated the Tanganyika, proved beyond doubt the important

hydrographical question that the Lukuga was a drain and not an affluent of the lake, and finally turned his face westward towards the Lualaba. This was the river which he had to follow whithersoever it led.

Stanley's descent of the Congo may be said to have begun when, on August 25th, 1876, he left Ujiji and crossed the Tanganyika. Before him lay the country of the Manyuema, a people who enjoyed the unpleasant reputation of cannibalism. This had so powerful an effect upon his men that, out of one hundred and seventy, no fewer than thirty-eight deserted. However, by dint of exercising firm discipline, Stanley managed to reassure his frightened followers and safely crossed the Tanganyika. His experience is only that of the other travellers who had attempted to go west of the lake in previous years—Livingstone had lost many, and Cameron more; it was now Stanley's turn. Desertion is naturally a comparatively easy thing for the Wangwana to effect; they are well known all along the routes, and can without any great personal risk trace their way back. The Lualaba was to them unknown; the country around that river was only familiar to them in the fearful tales told by Arab travellers. No wonder, then, that desertions were almost wholesale, and that it was only by exercising the strongest persuasion that Stanley was enabled to enter the country of Manyuema with a goodly following.

They were now ascending the watershed which divides the basin of the Congo from that of Lake Tanganyika; this once surmounted, the route to Manyuema was fairly plain sailing. The country has been often described, but it can never be said too often that it is one of the few regions of Africa which are pleasantly diversified by hills and valleys and plains and streams. There is nothing formidable or even pronounced about it; it bears no resemblance to the lower basin of the Congo, and none to the upper

reaction between Stanley Pool and Stanley Falls. It was at Riba-Riba that he reached the frontier village of Manyuema. That he had come upon a new race was at once proved by the simple architecture of the villages: he here met with a new form of house. The pointed, tent-like hut of Eastern Africa gave place to a square walled hovel, which had a sloping and mud-plastered roof. Styles of domestic architecture are so widely spread through Africa, and their differences are so marked, that you can at least say where you are not by simply looking at the huts. From Riba-Riba he passed rapidly on through the dense underwood of the Manyuema forest, and finally arrived at Bambarre. It was here that Livingstone was laid up so long with fever and ulcerous sores, and his successor soon learned from the natives' talk that this was indeed the place where "the old white man" had stayed so long. Stanley accordingly pitched camp, and set about gathering information about Livingstone's life at Bambarre. The natives in their turn wanted to know if he was the son of the "old white man," and when they heard that their old visitor was dead and gone—as Stanley indicated—up to the sky, they looked up and asked whether he had come originally from above. The people appeared to cherish his memory, as indeed the natives who came in contact with his unselfish and whole-hearted personality everywhere do.

These Manyuema were noted for their weapons, and, in particular, for their well-balanced, light, but effective spears; their shields were so strong that Stanley likens them to wooden doors. In many respects they showed themselves to be a superior people. Their houses, for instance, were separated into several apartments and, what is more, were kept clean. They lived under strict laws and seemed to be loyal to their chiefs. Their villages were formed of one street, more than fifty yards in width, and along each side were ranged their square huts, giving the general effect of a wide avenue.

Stanley was now following the course of the Luama, which flows into the Congo—or as it was then called the Lualaba—at Nyangwe; but he afterwards diverged from the valley, and did not see the river again until, having surmounted a low ridge of hills, he looked down upon its confluence with the Lualaba. At this point the Lualaba was at that time some three-quarters of a mile in width. Stanley, who of course is a competent judge, likened it to the Mississippi before it receives the Missouri, and he tells us that it was with deep emotion that he looked upon the mighty stream that flowed northward away—whither? He felt that the task which Livingstone had set himself, and which he had been unable to fulfil, which Cameron had had the opportunity of taking up but from which he had forborne, now lay before him. With that indomitable pluck of his, and in one of those sudden stern resolves which mark so many of his actions, he found no difficulty in settling the question which lay before him. The river was there; it was his task to follow it to the ocean.

In my short “Life of Livingstone” I have pointed out how largely this river occupied the labour of the last years of his life. I have shown how he believed it would ultimately be found to flow into the Nile. “And yet he would often pause and wonder if, after all, the Lualaba turned sharply to the west and flowed with great rapidity, and possibly—owing to the elevated edge of the central plateau—over lofty falls to the west coast, finally entering the Atlantic Ocean as the Congo. Might it not, even since the natives declared it flowed north and north for ever, reach into the far Soudan and form a mighty contributory stream of the Niger? But he would turn away time and again from his conjectures, and believe, as he hoped, that it must ultimately prove to be the Nile. And the thought that it might be his part to uncover the hidden source of the river which had witnessed the wonderful works of the Pharaohs, and the still more

marvellous acts in which Moses had revealed the irresistible power of the One God to those who worshipped the white bull, seemed to sanctify all the toil, and reward the weariness and pain which the quest of this 'holy grail' of his enjoined." What Livingstone only attempted, Stanley finished.

The next day Stanley met a man with whom he was destined to act in the future upon more than one occasion, and with whom he only finally broke after



TIPPU TIP.

his rescue and relief of Emin Pasha more than ten years later. This was none other than Hamed Bin Mohammed, or Tippu Tip as he was generally called. His features are known now to most of us, but in those days, of course, his fame had not gone beyond Zanzibar. At this time he was in the prime of life; a tall, black-bearded man, showing in his manner what he had inherited from his Arab father, and in his face the negro characteristics of his mother. Yet this face was an intelligent one, and he has invariably

proved himself to be gifted with administrative and strategic power. "With the air of a well-bred Arab," says Stanley, "and almost courtier-like in his manner, he welcomed me to Mwana Mamba's village, and his slaves being ready at hand with mat and bolster, he reclined *vis-à-vis*, while a buzz of admiration of his style was perceptible from the onlookers. After regarding him for a few minutes I came to the conclusion that this Arab was a remarkable man, the most remarkable man I had met among Arabs, Wa-Swahili, and half-castes in Africa. He was neat in his person, his clothes were of a spotless white, his fez cap brand-new, his waist was encircled by a rich dowe, his dagger was splendid with silver filigree, and his *tout ensemble* was that of an Arab gentleman in very comfortable circumstances." Livingstone had formerly met him at a village of Ponda, to the southwest of the Tanganyika, and he tells us that he was called Tippu Tip because that means "The-gatherer-together-of-wealth." More recently he had performed a service for Cameron, in escorting him across the Lualaba, and taking him so far on that western journey as Utotera; and when Stanley met him he quickly enough came to the conclusion that there was no one from whom he could learn so much of Cameron's journey. It should be remembered that Stanley did not yet know for certain whether Cameron had descended the Lualaba. From Tippu Tip he was able to get the very information he needed, and that individual informed him that Cameron had gone southwest and had not attempted to descend the river. In fact, Stanley found out that the great problem of Central Africa was still unsolved; that it was left in the exact state it was when Livingstone, unable to proceed, had wearily retraced his steps to Ujiji. Cameron had been turned back by the want of men, by the impossibility of obtaining canoes, and by the reports of the savage natives who infested the great forest which came down to both banks of the river.

The question before Stanley, therefore, was how to meet and overcome these very difficulties, and with his usual rapid way of coming to a resolution he asked Tippu Tip to accompany him down the river—of course for a "consideration." After a considerable amount of argument and discussion, it was decided that there should be a grand *shauri*, in which several of those who were in a position to speak should talk the matter over. When the time had come, Tippu Tip and some of his people appeared, and then Stanley restated his intention of going down the river in canoes. Tippu Tip wished to know how many days' journey it would be, and Stanley of course was unable to tell him. However Tippu produced a man who said that he had reached a point further than anybody else, and the following conversation then took place:—

"Speak, Abed, son of Jumah," said Tippu Tip, "what you know of this river."

"In which direction does it flow, my friend?" said Stanley.

"It flows north."

"And then?"

"It flows north."

"And then?"

"Still north."

"Come, my friend, speak; whither does it flow after reaching the north?"

"Why, master," replied he, with a bland smile, wondering at Stanley's apparent lack of comprehension; "do not I tell you it flows north, and north, and north, and there is no end to it? I think it reaches the Salt Sea—at least, some of my friends say so."

"Well, in which direction is this Salt Sea?"

"God knows!"

"I thought you said you knew all about the river?"

"I know it goes north," said he;—and that was all he could tell.

After more cross-questioning and a good many crooked answers, Stanley came to the conclusion that

there was not much that was helpful in what the son of Jumah had said ; however, he had a long interview with Tippu Tip, with the result that Tippu agreed to accompany him a distance of sixty camps, each camp being four hours' march from the other, for the sum of £1,000, on condition that the journey should commence from Nyangwe in any direction that Stanley chose, and on any date that he fixed ; that it should not occupy more than three months in all ; that the rate of travel should be two marches to a halt, and that, if he accompanied Stanley for sixty marches, they should then return together to Nyangwe, for mutual protection, unless Stanley met traders who would assist him to the west coast, in which case two-thirds of Stanley's forces were to return with him. Stanley also agreed to provision one hundred and forty of Tippu's men both in going and returning, and that, if it were found impossible to continue the journey, the Arab should have not only his \$5000 but also an immunity from all responsibility. On the next night occurred that memorable scene with his one surviving officer, Frank Pocock. In the low hut, dimly lighted with a couple of small palm-oil lamps, he discussed the situation with the only other white man then in Central Africa. After a long while they agreed to toss up. This is what Stanley says of the scene :—

“ ‘ Heads for the north and the Lualaba ; tails for the south and Katanga.’ ”

“ Frank stood up, his face beaming. He tossed the rupee high up. The coin dropped.

“ ‘ What is it ? ’ I asked.

“ ‘ Tails, sir ! ’ said Frank, with a face expressive of strong disapproval.

“ ‘ Toss again ! ’ ”

“ He tossed again, and ‘ tails ’ was again announced, and six times running ‘ tails ’ won.

“ We then tried straws—the short straws for the south, the long straws for the river Lualaba—and again

we were disappointed, for Frank persisted in drawing out the short straws, and in leaving the long straws in my hands.

"It is of no use, Frank. We'll face our destiny, despite the rupee and straws. With your help, my dear fellow, I will follow the river."

It is not a little curious that it was Pocock who tossed the coin and drew the straws every time; those who believe in such necromancy may here find a curious confirmation—for Pocock never reached the west coast. But I am anticipating.

From Mwana Mamba's district, where the interview with Tippu Tip had taken place, it was only a five-mile march to Nyangwe. This Arab settlement was at that time the most western point these inveterate slave-traders had reached. Far different is it now! Manyuema, fertile and densely peopled Manyuema, is now a wild depopulated waste. From Nyangwe the slave-trade routes stretch south-west across the country of Basongo to Lunda; north-west they pierce to the heart of the Free State. They have followed in Stanley's track, and at Stanley Falls is a new centre from which to send out fresh routes. But Nyangwe, when Stanley first reached it, was still the important town of the western frontier. It consisted of two divisions, each with its paramount Arab chief. At this time, perhaps, Nyangwe contained four or five hundred houses.

On November 5th, Stanley left Nyangwe with a force of a hundred and fifty natives (men, women, and children), among whom were divided about sixty guns; and accompanied by Tippu Tip, who had about seven hundred men in his train, three hundred of whom left on a slaving and ivory expedition a few days later. He travelled on the east side of the river, on the look out for an eastern branch which might float him down to the Nile; but, as we shall see, the river had a very different course. On the following day he entered a dense forest which proved very difficult marching.

The trees shed their dew like rain; to use Stanley's dramatic language, "every leaf wept." And the foliage was so dense that the daylight was absolutely lost. Whether the sun shone or the sky was veiled with clouds mattered not; for in this forest they could not tell the difference! The undergrowth, rank and close, was twenty feet high; the ground at their feet a loose, rotten, decayed bed of leaves and twigs. The air was close, stifling; the fallen and dying vegetation gave out a death-dealing miasma; the steam ascended in a cloud; and though Stanley pushed on as fast as was possible, "fast" in such a forest could not but be slow. Six miles in one day was a good performance. The great ferns, the sharp spear-grass, the lofty water-cane, thick ropes of creeping and climbing vines, switching rattans and dense mimosas, all made progress extremely difficult. Moreover, Tippu Tip the redoubtable lost heart, and did his best to persuade Stanley to return. But, by dint of bribe and argument, the latter induced him to at least accompany the expedition for another twenty marches—when they would have embarked upon the river.

On November 17th they arrived at Kampunzu in the Uvinza country, and here Stanley was astonished by the sight of a long row of skulls ranged along the wide street of the village, and which, at first sight, appeared to be those of human beings. He was informed, however, that they belonged to the "sokos" or chimpanzees which inhabited the dark depths of the forest; and on making inquiries he was told that they were considered good eating. But he brought two skulls of these supposed "sokos" home with him, and Professor Huxley, after a careful examination, pronounced them to be those of human beings. The people of Uvinza, in short, were cannibals.

On November 19th, Stanley found himself once more on the banks of the Lualaba, at a point forty-one miles north of Nyangwe. From here he always speaks of the river as the Livingstone, and for many

reasons it is to be regretted that this name has not been adopted; but as "The Congo" has now become so firmly established as the designation for this mighty river, I shall refer to it always by that name.

After pitching camp on the banks of the river, Stanley thought it was a favourable opportunity for addressing the Arabs and his own men, and accordingly delivered the following characteristic speech:—
"Arabs! sons of Unyamwezi! children of Zanzibar! listen to words. We have seen the mitamba (forest) of Uregga. We have tasted its bitterness and have groaned in spirit. We seek a road. We seek something by which we may travel. I seek a path that shall take me to the sea. I have found it. Yes! I have found it. Regard this mighty river. From the beginning it has flowed on thus as you see it flow to-day. It has flowed on in silence and darkness. Whither? To the Salt Sea, as all rivers go! By that Salt Sea, on which the great ships come and go, live my friends and your friends. Yet, my people, though this river is so great, so wide, and deep, no man has ever penetrated the distance lying between this spot on which we stand and our white friends who live by the Salt Sea. Why? Because it was left for us to do." Here the people cried "No!" and despondingly shook their heads. But Stanley heeded not. "Yes! I tell you, my friends, it has been left from the beginning of time until to-day for us to do. It is our work, and no other. It is the voice of fate! The ONE GOD has written that this year the river shall be known throughout its length. We will have no more mitambas; we will have no more panting and groaning by the wayside; we will have no more hideous darkness; we will take to the river, and keep to the river. To-day I shall launch my boat on that stream, and it shall never leave it until I finish my work. I swear it.

"Now, you Wangwana! you who have followed me through Turu, and sailed around the great lakes

with me; you, who have followed me like children following their father, through Unyorò and down to Ujiji, and as far as this wild, wild land, will you leave me here? Shall I and my white brother go alone? Will you go back and tell my friends that you left me in this wild spot and cast me adrift to die? Or will you, to whom I have been so kind, whom I love as I would love my children: will you bind me and take me back by force? Speak, Arabs! Where are my young men, with hearts of lions? Speak, Wangwana, and show me those who dare follow me!"

Uledi, one of his most faithful followers, sprang to him, and grasped him round the knees, and shouted: "Look on me, my master! I am one! I will follow you to death!"

Uledi's example brought some followers out from the frightened crowd, but of the whole number not forty came forward. Still Stanley, knowing his men, reckoned, and reckoned rightly, that the weak-kneed and those that were faint of heart would in the end be persuaded by their braver brethren.

Very shortly afterwards Stanley had the boat—the *Lady Alice*, in which he had circumnavigated the Nyanza and Tanganyika lakes—put together and launched. Crossing the river he found that there were some natives with a number of canoes on the other side, and these he induced to ferry his followers over the river. They camped that night on the other side. The next morning Stanley began his descent of the Congo; he in the *Lady Alice* with some thirty men on board, and the rest of the party marching on the river banks under the leadership of Pocock and Tippu Tip. As they advanced, the war-cries of the natives resounded across the water, but not a native could be seen; those who shouted defiance concealed themselves in the dense bush! From time to time, as they passed a village whose open market-place upon the bank might be crowded with people, loud yells of fear and menace would be raised, only to be followed

a few moments afterwards by the total disappearance of the people, and a solemn unbroken silence.

It was here that for two days Stanley lost sight of the land party, who, in a *détour* of the banks of the river, had missed their road and were afterwards attacked by the natives. However, they were soon found by Uledi whom Stanley despatched in search of them, and the expedition was once more united.

But the march through the forest, and the scarcity of food in those regions, had begun to tell their tale. Many were much weakened, some were almost unable to walk, dysentery and small-pox affected a few. These Stanley placed upon a raft which he formed out of some old canoes he had found under the river's bank, and the expedition marched on. Occasionally a sharp fall or a wild rapid interrupted their descent of the river, but otherwise no opposition to their advance occurred. That was to come. Yet disease was every day laying a firmer hold upon his followers. A day did not pass but some of the foot-sore and weary Wangwana found their graves in the waters of the Congo.

On December 8th, at Unya-Nsinge, they experienced their first—but not their last—attack at the hands of the natives. Fourteen large canoes, crowded with warriors blowing their war-horns, and threatening with spears and poisoned arrows, approached them as they were encamped on the bank. Not knowing, probably, the reception they were likely to meet, they dashed ashore, but at the very moment that their canoes grounded a heavy volley made them alter their tactics to a rapid retreat. But they did not go far, and with their bows and arrows still kept up the attack. Stanley now manned his boat, every man being armed with a gun, and getting within short range, he put three or more volleys into them, with such considerable effect that almost the next minute this battle was at an end and the savage assailants in full flight.

Some ten days afterwards, when off Vinya-Njara, Stanley's boat and his hospital-raft were suddenly attacked by natives who remained in ambush in the jungle. As their numbers rapidly increased, Stanley determined to camp, and raise a boma or fence of brushwood. While doing this he kept off the enemy by sending out detachments of scouts, but as soon as these were recalled the savages pressed forward in vast numbers. So bravely did they fight that they were often shot down with the muzzles of the guns touching their breasts. They hurled their spears right over the stockade in vast numbers, and with great strength, but the fire of Stanley's men cleft deep gaps in their ranks. Their war-horns boomed louder and louder, their wild yells were answered by the shouts of the Zanzibari, the clatter of their spears as they struck against the shields of the defenders alternated with the sharp crashes of the answering volleys. Wrought up to an intense pitch of excitement, both sides yelled like furies, and higher than all rose the shrieks of the wounded or of the terrified women. This went on until night fell with that swift suddenness which is peculiar to the end of the day in the tropics, and then the enemy retreated; but the defenders of the hastily constructed camp dared not seek rest in sleep. Fortunate for them that they did not! At midnight Stanley, who was straining his eyes through the pitchy blackness of the night, perceived the crouching form of one of the savages creeping in the long grass to the stockade,—sent no doubt to spy out the state of things within the camp. In a whisper Stanley gave orders to some of his trusty followers to catch him, and three of his men crept through an opening in the fence; but just as they sprang upon him the whole forest became alive with howling savages, whose arrows showered over the stockade like gusts of hail. Volley after volley was poured into them, and after a short time they again retreated. The next morning Stanley

found that they were in the heart of a densely peopled district, and that a short distance below their camp lay the important town of Vinya Njara,—or, perhaps I should say, the series of villages comprised under that name—in the midst of extensive banana plantations. And when he looked round upon his people, and saw how many were wounded and how many were rendered useless by disease and want of rest, he made up his mind that the first of these villages must be stormed and taken. He fortunately found that the village had been temporarily deserted by the savages, who were still lurking in ambush in the forest, and with his force he quickly possessed himself of the situation. No sooner, however, had he blocked up the entrances to the village and stationed riflemen in the highest trees, than the savages, realising the meaning of Stanley's sudden move, came rushing through the forest. But they found it impossible to dislodge the new occupants of their homes, for Stanley gave the order to fire, and as a consequence the Wangwana, nothing loth, kept up a continual blaze until they had once more beaten off their assailants. Then, for the first time for several hours, was there an opportunity of rest or refreshment; but their meal was a hurried one, for there was still much to do before their position was quite secure. Stanley now built lofty nests, each capable of holding and protecting a dozen men; he then had all the high grass and brushwood within gunshot-range of the village cut down, and at every point where it was possible he strengthened the defences. That night they passed in comparative quiet, but the next morning the enemy rushed forward across the open to renew the assault. However, they were taken aback by the preparations made for them, and after a short contest again retreated. Later on, however, a large number of canoes, densely packed, dropped down the stream towards the camp with their war-horns blowing and their war drums resounding. Simultaneously the savages in the

forest replied, and the next moment the storm broke. On land and river, at one and the same time, the poisoned arrows flew in clouds; from the stockaded camp answering volleys of musketry bailed slugs and bullets, and shots of almost every known size—for the guns of the Arabs and the Wangwana are of exceeding variety. The men fought as they had never fought before; standing up to their guns with an ever increasing self-forgetfulness as they warmed to their work. But in the absence of their land force, which had been delayed in the forest, their comparatively small numbers gave cause for a reasonable amount of anxiety; they were out-matched in numbers as twenty to one. After some time, however, this force made its appearance and caused their assailants to retreat. Those in the canoes made off to the other side of the river, nearly a mile across, and encamped on an island.

From this circumstance Stanley concluded that they would renew the attack on the following day, and therefore he conceived the daring project of cutting their canoes adrift in the darkness of the night. Fortunately for his plan that night proved not only dark but squally, and Stanley sent Pocock with some men to bar the river below the island and secure the canoes as they drifted down. Meanwhile Stanley rowed very quietly to the spot where the canoes were moored, and succeeded in cutting adrift no fewer than thirty-six, some of them being very large. As they floated down stream Stanley followed them, and with the assistance of Pocock managed to tow them all into camp. Next morning he again journeyed to the island, which he found nearly deserted, the discomfited savages having swum across to the mainland. To the few who remained, however, he declared that unless they made peace he would keep the whole of the canoes, but that if they would come to terms he would give back several and buy the rest. Having but little choice left, the natives finally agreed to the conditions, and Stanley bought twenty-three canoes, giving back

the rest. He was now in a position to embark his land force.

It was here, however, that Tippu Tip made a final stand. He declared that he had had enough of the dangers of the Congo. Disease and death were rapidly thinning his ranks, and the succession of attacks which the natives had made had thoroughly demoralised his people. Stanley, who felt far more hopeful now that he had secured so many canoes, agreed to let him depart, although he had not fully performed what he promised to do. In fact, in consideration of Tippu's help he made handsome presents not only to him but to all his men, and after spending a merry Christmas Day together, took a cordial farewell of the great Arab chief. On December 27th he embarked his own party, not one of whom had deserted to the Arabs. This was indeed a triumph.

On December 30th they passed the mouth of the Lowwa river—about three-quarters of a mile in width—and soon afterwards the forest on either bank became denser. While encamped under its leafy shelter Stanley had time to observe the abundance of animal life, which kept up a constant hum in its depths. "One hears," he says, "much about the 'silence of the forest'—but the tropical forest is not silent to the keen observer. The hum and murmur of hundreds of busy insect tribes make populous the twilight shadows that reign under the primæval growth. I hear the grinding of millions of mandibles, the furious hiss of a tribe just alarmed or about to rush to battle, millions of tiny wings rustling through the nether air, the march of an insect tribe under the leaves, the startling leap of an awakened mantis, the chirp of some eager and garrulous cricket, the buzz of an ant-lion, the roar of a bull-frog. Add to these the crackle of twigs, the fall of leaves, the dropping of nut and berry, the occasional crash of a branch, or the constant creaking and swaying of the forest tops as the strong wind brushes them, or the

gentle breezes awake them to whispers. Though one were blind and alone in the midst of a real tropical forest, one's sense of hearing would be painfully alive to the fact that an incredible number of minute industries, whose number one could never hope to estimate, were active in the shades. Silence is impossible in a tropical forest."

On the last day of the year the sun shone clear, and all looked beautiful and promising. But farther down the river boomed the war-horns of startled tribes, and before them lay, for all they knew, another battle. As they descended the stream the canoes of the savages came out to meet them; but shouting "Sennenneh"—"Peace"—they were allowed to pass on unassailed. With the new year, however, they met with tribes not so easily pacified; the friendly "Sennenneh" had no effect, and the people, who were cannibals, began to rejoice in loud fashion over the feast they would make of these wandering Argonauts.

"We shall eat meat to-day!" they cried. "Oho! we shall eat meat."

Then a fleet of canoes rushed forward to engage them, but a series of volleys, fired at unpleasantly close quarters, drove them back again to the cover of the shore without having had any opportunity of satisfying their unnatural cravings. And, as Stanley and his flotilla passed on, the river widened to nearly two miles in breadth, and they felt they were comparatively safe.

But it was not for long. For on the following day they fought a succession of fierce but short battles with the briefest possible intermission. It was not until the sun sank low in the burnished sky that they had rest from the constant attacks, and were able to camp in comparative quiet. In the course of the next day they were able, by a fortunate chance, to make friends with some natives, and from them they learnt that lower down the river were large and dangerous falls, over which, the natives said, no boat

could possibly pass and live. This made Stanley proceed with greater caution, but before he reached the first rapids he had another battle to fight, and it was in this fight that he captured the largest canoe he had yet seen on the Congo. It was over eighty feet in length.

Soon after passing a river which he named after Leopold, King of the Belgians, the Congo gradually narrowed and ran through steeper banks; soon, too, they heard the noise of the first cataract. As they dropped down the river louder and louder became the sound, but still more loudly rang the savage yells from both banks of the river. The question for him to decide was an awkward one. It was simply a choice between a stubborn fight with the infuriated cannibals, or a desperate surrender to the boiling waters of the falls. Stanley preferred to deal with the ills with which he had some acquaintance, rather than to encounter those whose dangers he did not know. Consequently the order was given to drop anchor and engage the enemy, and finally he managed to land and camp on shore.

Early the next morning they were again roused by the attacks of the natives. But furious as was the onslaught of the relentless savages, more desperate was the case of the defenders. Thus far had they come through opposition of a remarkable character; forward would they continue to advance, even though that opposition was not withdrawn. The result was that a fierce battle ensued for about seven hours, which had the wholesome effect of driving the natives off for at least two days.

Stanley was thus enabled to ascertain the character of the falls below. "The main stream," he says, "nine hundred yards wide, rushed towards the east-north-east, and after a mile of rapids tilted itself against a hilly ridge that lay north and south, the crest of which was probably three hundred feet above the river. With my glass, from the fork of a tree

twenty feet above the ground, I saw at once that a descent by the right side was an impossibility, as the waves were enormous and the slope so great that the river's face was all afoam; and that at the back of the hilly ridge which obstructed its course, the river seemed piling itself into a watery bank, whence it escaped into a scene of indescribable confusion—down to the horror of whirling pools and a mad confluence of tumbling, rushing waters."



STANLEY FALLS.

He therefore decided to follow along the left bank, and having had a rough road made of brushwood and rattans, all the canoes were hauled over the ground by the following night, and re-embarked a mile below the first cataract of the falls. The water here was smooth for a while, and, lying in close to the left bank, they paddled on until the thunders of the second cataract stayed their hands. Again the savages crowded the river's bank, yelling defiance at the voyagers. Again the choice had to be made between

wild man and wild nature, and Stanley, inclined this time to prefer the latter, sent off an old canoe which he could spare on an experimental voyage over the falls. They watched it, he says, "shoot down like an arrow, and circle round that terrible whirling pool, and the next instant saw it drawn in by that dreadful suction and presently ejected, stern foremost, thirty yards below. Close to the bank were nooks and basin-like formations in the trap rocks, in which, every now and again, the water became strongly agitated and, receding about twelve inches, would heave upwards with a rushing and gurgling that was awful."

He therefore felt that he must fight it out with wild man, and, boldly landing, put himself at the head of his men and drove the astonished natives back from the bank. While Stanley was presenting a stubborn front and occasionally discharging telling volleys, Pocock was building a camp in the rear, and piling up a boma of bushes and light wood. When this was finished the defending line retreated in order to the camp. But not to rest; for torches had to be made and men to be drafted into gangs, and all that night they again cut their way through the jungle and made a road for their canoes. So hard did they work that, next morning, they were able to advance for three miles, although fighting the whole way. Again was a camp built, and again that night was the road carried forward; and on the following day the same scene ensued. And so it went on during the third and fourth days—cutting rough roads, advancing with swift rushes, and beating off savage assailants. All the time they carried, as it were, their lives in their hands; the Zanzibaris, who at first had been so timid and fearful, had become, under the strict discipline maintained, and nerved by the many fights in which they had been engaged, both valiant and steady.

While pitching camp opposite Ntunduru Island an accident occurred which was of a most singular

character. Immediately below the island was a great fall, and the river glided down to it through a long stretch of rapids. While the men were drifting down these rapids to the camp one of the canoes was upset in the course of the journey, and the crew precipitated into the river. With the exception, however, of a Wangwana chief named Zaidi, they swam to an island and were rescued. But Zaidi clung desperately to the canoe, and was soon carried down by the rapid flood, with increasing speed, to the very brink of the fall. He shot past the camp in full view of his fellow-travellers, who could do nothing to save him. But, by the merest chance in the world, the canoe drove straight on to a small rock which showed its head above the water at the extreme edge of the fall. Jammed against this rock by the force of the current it stuck fast, and Zaidi, scrambling on to the rock, held on to the upturned end of the canoe.

The position was a perilous one. By turning his head he could look down in the seething waters just below him, whirling and swirling in the wildest confusion. Above, the river came rushing down to its fall; on his right the edge of the fall stretched to a small patch of unwashed rock, and between that and the bank the waters rushed down a sharp drop with fearful violence. What was to be done? Now and again the river washed over the crouching Zaidi, and if he had let go his hold for a moment he would have been carried in the next over the fall.

The situation was critical. Stanley had a long rope made of twisted rattans, and attaching this to a small canoe, dropped it into the river above and let it glide toward the unfortunate man. But as it neared him the force of the current proved too strong, and, the cable snapping, the canoe was swept over the fall, whirled round and round, tossed into the air, and finally smashed into pieces! This was the first failure; and another attempt ended in the same way. The rescue was rendered all the more difficult owing

to their being unable to speak to him, the roar of the cataract drowning the loudest shouts. Moreover, the rock on which he was perched was so small that he dared not move hand or foot to help himself. Stanley now had a rattan rope made, much stronger and thicker than before, and secured it to the bow of a canoe; and two more ropes of similar strength he attached to the side and stern. These were ninety yards in length. Then he called for volunteers. There was no reply. Then he offered rewards. Yet there was no answer. At last, Uledi—the faithful Uledi, one of the very best fellows that ever trod African soil—volunteered, and immediately afterwards Marzouk, his friend, came forward. They embarked in the canoe, which, after several attempts, was got within a few yards of Zaidi. Then Uledi threw to him the end of a short rattan rope which had been fastened to the stern of the canoe, and this he fortunately caught. But the next moment he was carried over the falls and out of sight. Still he clung manfully to the rope, and the men on shore began to pull on the cables attached to the canoe. Almost at the same moment they gave way, and the canoe drifted towards the fall. Its destruction seemed indeed imminent, but suddenly it was swept against the small patch of unwashed rock which stuck out some thirty feet from the point on which Zaidi had been perched, and the crew were saved. They sprang on to the rock, and hauled up the canoe, and then pulled the unfortunate and half-drowned Zaidi up out of the falls. For the time, therefore, they were safe; but between them and the bank was still a wild patch of rushing, leaping water, fifty yards in width. A long line of stout cord was now fastened to a stone, which the party on shore threw toward the rock, and after many attempts the shipwrecked and stranded Wangwana caught it. To this cord a rope was tied, and soon the rope also was hauled across. But now night fell, and all further attempts at rescue had to be abandoned. With the

morning, however, they were renewed. Very strong cables were twisted and hauled across to the little island, and more slender ropes for the men to fasten round their waists and to the cable which was to draw each ashore. One stout rope, too, had its ends made fast both on shore and on the island, and this was to serve as a bridge to help them, using hand over hand, across the wild stream.

At last all that could be done had been done: the final moment had arrived. Uledi was the first to go. He bound himself tightly to one of the cables, called upon Allah to help him, and then plunged into the seething flood. Willing hands on shore pulled at the rope; he raised himself in the water and laid hold of the bridge-rope; and thus, half-drowned with the waves which washed over him, he was rapidly drawn to shore. Zaidi came next, and he too was rescued; and finally Marzouk, who in midstream lost hold of the cable by which he was being pulled ashore, but clung madly to the bridge-rope, was safely landed, and a thrilling incident was at an end.

On January 19th, after passing five falls, the expedition again took to the river, and travelled on until, on the 23rd, they came to the sixth cataract. This they passed without mishap, and Stanley found by astronomical observations that they had just crossed the equator. The river, which had been flowing a little to the east by north, now suddenly turned to the north-west, and Stanley, who had almost come to the conclusion that Livingstone was right, and that the Lualaba was after all the Nile, found himself strengthened in his own theory that it would prove either the Congo on the Niger. Resuming the journey, therefore, with a greater feeling of certainty, on the 24th he reached the seventh and last of the cataracts which were to be known henceforward as Stanley Falls, and prepared to encamp. But the natives—the Wenya—were as hostile as their brethren above the falls, and no sooner had the Wangwana constructed a

rough boma than the Wenya were upon them in strong force, and with the wildest fury. After some hours of hot fighting they retreated, and with night came rest for the weary voyagers. The next morning they passed over a shallow rapid to a large island which lay above the cataract, and appeared to be densely peopled. The inhabitants, however, had left the island to join their brethren on the banks; and Stanley accordingly pitched his camp there while the canoes of the expedition were safely brought down a shallow part of the rapids at the side of the main stream. After two days' hard work and hard fighting the seventh cataract was left behind them, and they were speeding away on the widening bosom of the river.

I may here quote a portion of Stanley's description of this cataract. He writes:—"The Livingstone (Congo) from the right bank, across the island to the left bank, is about one thousand three hundred yards broad, of which width forty yards is occupied by the right branch, seven hundred and sixty yards by the island of the Wenya, five hundred yards by the great river. Contracted to this narrow space, between the rocky and perpendicular bluffs of the island and the steep banks opposite, the uproar, as may be imagined, is very great. As the calm river, which is one thousand three hundred yards wide one mile above the falls, becomes narrowed, the current quickens and rushes with resistless speed for a few hundred yards, and then falls about ten feet into a boiling and tumultuous gulf, wherein are lines of brown waves six feet high, leaping with terrific bounds and hurling themselves against each other in dreadful fury. Until I realised the extent of the volume that was here precipitated, I could hardly believe that it was indeed a vast river that was passing before me through this narrowed channel. I have seen many waterfalls during my travels in various parts of the world, but here was a stupendous river flung in full volume

over a waterfall only five hundred yards across. The river at the last cataract of the Stanley Falls does not merely *fall*; it is precipitated downwards. The Ripon Falls at the Victoria Lake outlet, compared to this swift descent and furious onrush, were languid. The Victoria Nile, as it swept down the steep declivity of its bed towards Unyoro, is very pretty, picturesque, even a sufficiently exciting scene; but the Livingstone, with over ten times the volume of the Victoria Nile, though only occupying the same breadth of bed, conveys to the sense the character of irresistible force, and unites great depth with a tumultuous rush."

The Wenya tribe were great fishermen, and had utilised the cataract with considerable ingenuity. They formed in the channels at the side well-constructed weirs, to which they attached large baskets. From what could be seen in the course of his brief sojourn on the deserted island, Stanley came to the conclusion that they were of a fairly high type. Their utensils—and especially their paddles—were well made out of suitable woods, and their cordage and fishing tackle were strongly and most ingeniously constructed of banana and other fibre.

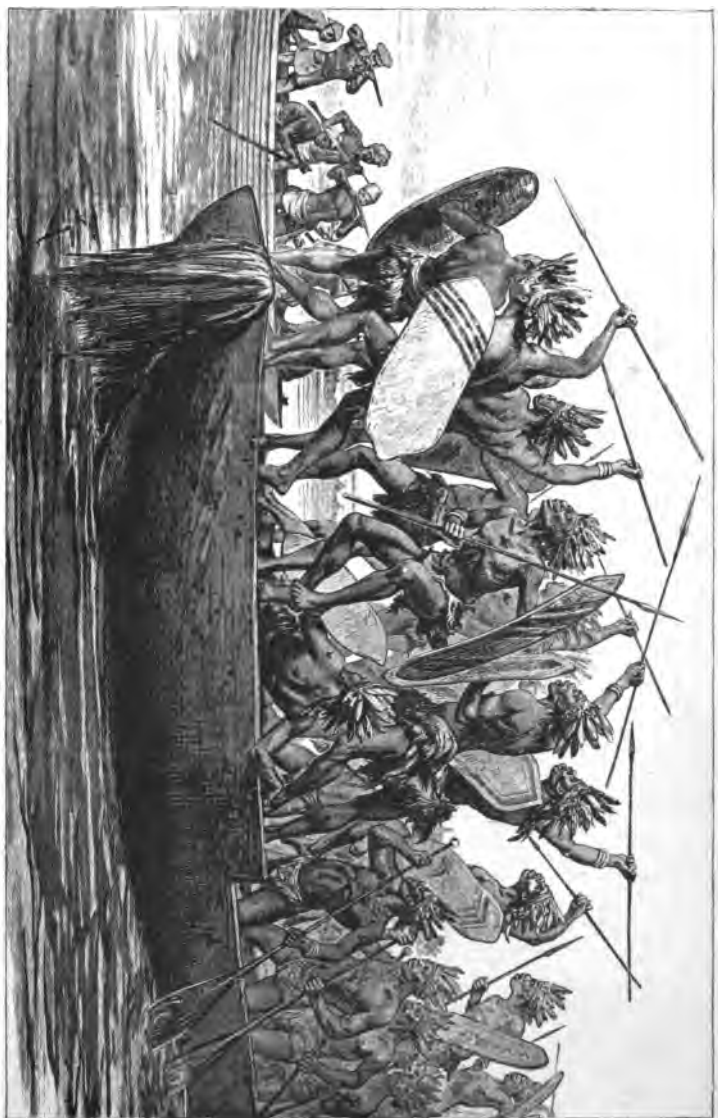
But the river—the broad and smoothly running river—now curved away before them, and the roar and tumble of the last of the Stanley Falls soon grew faint behind. On the 28th they passed the wide opening of the Mbura river as it debouches on the right bank of the Congo, and a short distance below the main stream widened out to over a mile. The next day, still following the right bank, they were attacked by the natives, and Stanley deemed it more prudent to land and make a boma. This was soon done, and, having cleared the jungle immediately surrounding it, he was ready for the enemy. The enemy, too, was ready for him. On they came, resplendently hideous in war-paint, waving oblong shields stoutly made of rattans, and brandishing their great broad-bladed spears. On they came, with a rush so dense

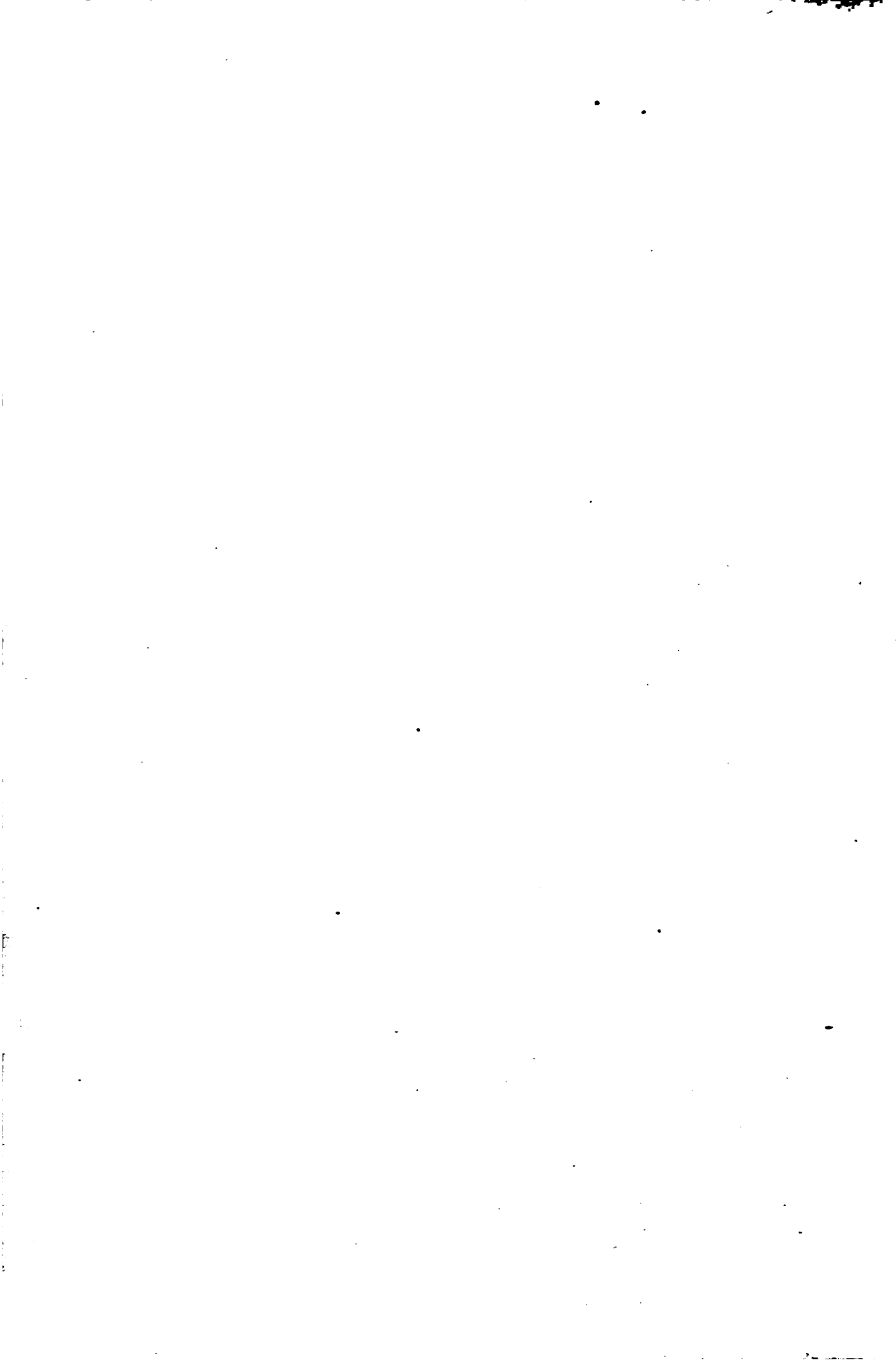
as to resemble the stampede of wild cattle. Their spears were long and heavy, and were hurled in immense quantities over the high fence of brushwood and among the defenders of the camp. Great gashes, too, they made whenever they struck the half-clothed Wangwana; one man had his body ripped open, and was killed on the spot. But one result of the many fights they had fought was the number of large heavy shields which they had been able to seize; and behind these the sick and the women, as well as the musketeers, were fairly protected. And so in this, the twenty-fourth battle they had fought, they were again victorious.

Early the next morning the little fleet got under weigh and proceeded down stream. They had only, however, been a few hours afloat when they were again molested, but, after capturing a canoe and obtaining some information from its crew, whom they then liberated, they were allowed to go on in peace.

The river was broadening; it was now more than two miles wide. Its stream was divided by many small islands covered with a dense vegetation. The scenery was rapidly becoming very beautiful, and they began to weary of the ceaseless fighting. Had they paddled at night, they would have escaped much of it; but then the river was unknown, and its dangers might be worse than the fury of savages. The high red cliffs which had marked the scenery near the falls were not so frequent now; they alternated with low but well covered banks. Here and there a well-grassed island offered a pleasing contrast to those densely overgrown with forest; here and there the towns, which were rather a collection of villages, ran for a mile and more along the bank, and imparted to the scenery a variety which though more human was under the circumstances less welcome. For every man's hand was against them, and perforce theirs was against every man. Now and again they would pass the open market-places which were situated

THE FIGHT OFF THE ARUWHIMI.





on the banks, and which formed good landing-places, and be greeted with wild shouts of defiance, and a blowing of horns and beating of drums to war. As these resounded from village to village, the warriors prepared for the unknown foes descending the river. Thus these open places of commerce and gossip and council, which might have proved so fertile of information had the natives been only peaceful enough to allow them to land, were passed by as rapidly as possible. Instead of being places where a landing might have been made and peace effected, they bristled with the spears of warriors and were resonant with their defiance.

On February 1st they came upon the wide mouth of a great river which flowed into the Congo on the right bank. So wide was it at this spot that Stanley estimated it at more than a mile. As the expedition prepared to cross the open water they beheld with astonishment, and not a little fear, a great fleet of huge canoes bearing down upon them. The canoes were the largest they had yet seen, and there were more than fifty of them. A huge canoe led the way, paddled by more than eighty men. On the decked forepart picked warriors stood in all the bravery of war-paint; at the stern were the helmsmen, eight in number. Stanley had time to note that there was a great profusion of ivory everywhere—ivory armlets, ivory-headed paddles, and the like—and then he gave the order to head up stream and drop anchor. The canoes ranged, ten yards apart, behind him and the gallant crew of the *Lady Alice*; every man looked to his gun and loaded it heavily.

On came the great fleet of Aruwihimi warriors, yelling their wild war-chant, beating their drums, and winding their ivory war-horns. On they came—some two thousand infuriated savages—with the flowing tide. But the little group of boats quietly awaiting them contained men who were not going to give up their lives without a struggle; men who were deter-

mined to fight as long as they could raise their guns to their shoulders, as long as a single cartridge was left.

As the foremost canoes swung alongside, the battle broke. The spears flew like hail; the guns belched out their deadly fire. The very yells of the combatants were unheard in the rattle of musketry. The volleys crashed and swept across the short intervening space and silenced the shrieks of the wounded. Now a large canoe would paddle up and discharge a broadside of spears; but the rifles and guns would flash in the sun as they were quickly levelled on the fresh assailants, and the roar of their volleys would make the very waters shiver, while the bullets swept the crowded canoe from stem to stern. Yet other canoes followed, each with its load of howling warriors, and the odds against the little band of wanderers were fearful. With the utmost steadiness, however, they poured in their fire. No one wasted his shot; each marked his man before he fired. Crouching behind the wall of captured shields ranged round the canoes the women were fairly safe; and the men, protected to some extent by it, were all the better able to keep up a steady fire. And this was murderous; the range was so short, and the canoes of the Aruwihimi savages were so packed, that every shot told with deadly force. Many a man leapt into the air as he received a fatal charge, and fell back unheeded into the river. Many a poor wretch, writhing in mortal agony in the bottom of the canoes, was trampled to death unnoticed by his comrades. It was hot work, indeed. Little wonder that everyone engaged in it had a blood thirst!

But it was too fierce to last, and the enemy retreated up the river. Stanley shouted to his men to weigh their anchors and pursue. Up the wide and unknown river they paddled as if for dear life, every now and again staying to pour a deadly fire into the retreating canoes. At last, as they rounded a reach, the enemy's villages came in sight; and doubling their efforts they

ran into shore almost as soon as the enemy had landed. Then they engaged them again, and again poured in a heavy fire upon them, until, at last, the cannibals were fairly defeated and sought safety in flight.

Stanley's people now sacked the village. They found a temple, or shrine, which consisted of a roof supported on a large number of great ivory tusks, and under this roof an idol rudely fashioned like a man. The tusks were taken away by the Wangwana. In the various houses an enormous quantity of ivory was found—ivory balls, ivory armlets, ivory hammers, ivory pestles, ivory horns and a number of other instruments—all were taken. But there were other treasures: splendid spears of all sizes and shapes—barbed, broad-bladed, sword-edged; iron bells and war-hatchets; iron and copper bangles and other ornaments, and a host of various instruments. Carvings in wood, too, were plentiful; spoons, paddles, clubs, drums, stools, staves, mortars, all were carved. There was everything to show, if their vast canoes and the daring attack had not already proved, that the Aruwhimi men were of a superior calibre. But as Stanley walked through the village he came upon many evidences of their cannibal tastes. On the top of many a pole grinned a human skull; on the refuse heaps of the village lay piles of human bones; and by the side of a fire which was not yet cold he picked up the forearm of a human being. With all their superior skill in forming implements for many uses, with all their higher development of human faculty, these savages were no better than their more helpless and degraded fellows above Stanley Falls.

Though Stanley's men had been victorious, the continual fighting was telling upon the victors. "This last of the twenty-eight desperate combats," writes Stanley, "which we had had with the insensate furies of savage-land, began to inspire us with a suspicion of everything bearing the least semblance of man, and to infuse into our hearts something of that feeling

which possibly the hard-pressed stag feels when, after distancing the hounds many times, and having resorted to many stratagems to avoid them, wearied and bathed with perspiration, he hears with terror and trembling the hideous and startling yells of the ever-pursuing pack. We also had laboured strenuously through ranks upon ranks of savages, scattered over a score of flotillas, had endured persistent attacks night and day while struggling through them, had resorted to all modes of defence, and yet at every curve of this fearful river the yells of the savages broke loud on our ears, the snake-like canoes darted forward im-



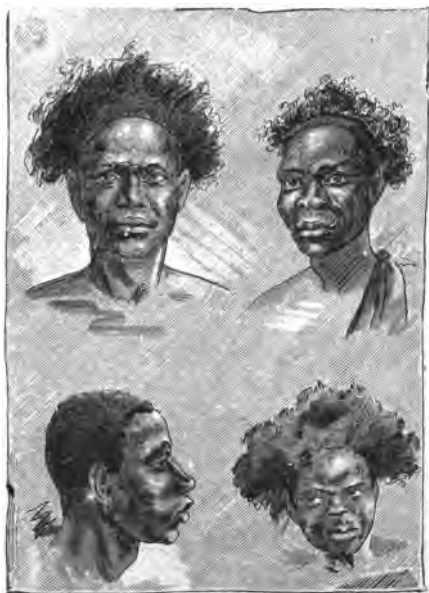
CONGO TYPES.

petuously to the attack, while the drums, and horns, and shouts raised a fierce and deafening uproar. We were becoming exhausted, yet we were still only on the middle line of the continent! We were also being weeded out by units and twos and threes. There were not thirty in the entire expedition that had not received a wound. To continue this fearful life was not possible. Some day we should lie down and offer our throats, like lambs, to the cannibal butchers."

That day, fortunately, was never to come. The great battle of the Aruwihimi was nearly the last which this Ever Victorious Expedition was to fight. And, for a time at least, they were now to enjoy comparative rest.

The river became wider than ever, but as it was

divided into several branches by the numerous islands which everywhere studded it, the exact breadth was difficult to ascertain. These islands, however, formed excellent cover for the boats; and for some days they were able to make uninterrupted progress. Once, it is true, they were sighted by the Barundu as they passed rather nearer the left bank than they had



CONGO TYPES.

intended, but though the savages gave chase they were unable to come up with the expedition.

Congo scenery at this stage is very attractive. Though the vegetation is dense there are long breaks of open grass country, and the wide river gives a feeling of freedom not experienced in tracking one's way through jungle. Moreover, there are many trees in this upper portion of the Congo which are more

than merely attractive—trees which can be made, and will be made, to yield up their riches. Vast gum-trees, forests of oil-palms, groves of ivory nut-trees, open up a prospect of wealth to be garnered in the coming years. If all go well—why should it not?—this upper basin of the Congo should ship to Europe and America many a fleet laden with precious cargoes.

But when Stanley passed down these wide reaches he was more intent on saving his own life, and the lives of his followers, than presaging the swelling argosies of a future commerce. Moreover, it was here that they began to experience the want of food. Stanley saw that there was nothing for it but to prepare to descend upon some village and loot it for food. But in spite of all the provocation and attacks they had endured, he still wished to make friends with the people. So he got together a number of shells, beads, and copper bracelets, to see if it were possible to do a trade, and when they came abreast of a village—its name should be handed down: it was the village of Rubunga—he rowed in close to the shore and then dropped anchor.

Marvellous! Not a war-horn was wound, not a war-drum was beaten! The very people themselves appeared as if they were going to be friendly! Friendly—and on the Congo! It seemed impossible—but proved not to be. For after gesticulating in pantomime for a while, and holding up a banana to his open mouth, and then passing his hand over his stomach to indicate that it was there that pangs—pangs of hunger—were being felt, Stanley began to realise that his silent audience at least understood what he meant. So, without any further delay, he lifted up the necklaces and bangles which he proposed to exchange for food, and endeavoured to set them off to the best possible advantage. He clashed the copper bracelets together till they rang again, and displayed the bead necklaces on his own somewhat tattered person. Then again he raised the banana to

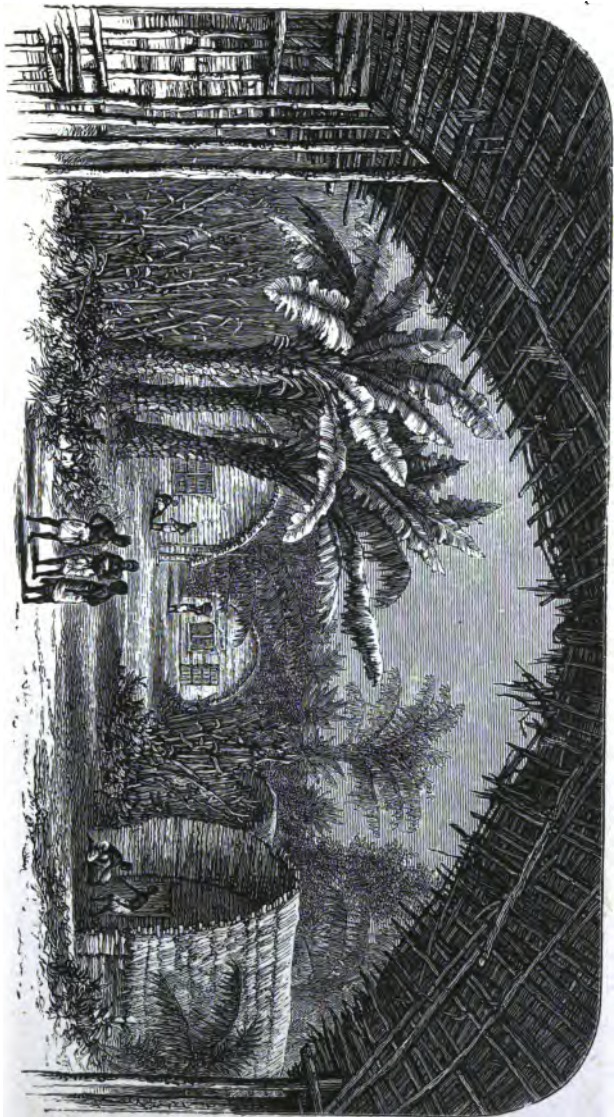
his mouth, and again indicated the hollow, hungry condition of his inner man ! At last his exertions were rewarded. The chief, with friendly smiles, beckoned him ashore, and ashore, accordingly, Stanley went. There they entered into various mutual explanations, mutually incomprehensible, and otherwise acted as men on the very best of terms. And when the ceremony of blood-brotherhood—in which two men, chosen from the two parties, prick each other's arms, and vaccinate them, as it were, with each other's blood—had been performed, for the first time in their perilous voyage down the Congo something like harmony and happiness reigned. Food was immediately forthcoming, and all went merry as the proverbial marriage-bell. They encamped that night on an island opposite Rubunga, and the next day a great market was held, and they were able to lay in a goodly stock of provisions—dried fish, dried meat, goats, bananas, plantains, flour, and bread. On the next day, with lighter hearts and more heavily laden canoes, they started off down stream and soon reached Urangi, where their reception was at first favourable, but subsequently underwent such a change to the aggressive that the next morning the expedition retired down the river under fire. For the first time they had met with natives who had guns, and though these were of ancient pattern and inferior metal, they inflicted many wounds on the Wangwana, one of whom, indeed, was killed.

On February 14th a memorable fight with the Bangala tribe took place. Of the Bangala they had already heard, higher up the river, as a great race of warriors and traders; and when their crowded war-canoes put out from shore, a minute's inspection showed that they would be far pleasanter as friends. And to make friends of them Stanley did his best. But of friendship they would have nothing: and so no choice was left. The Bangala began with a volley right and left into Stanley's and Pocock's boats; the

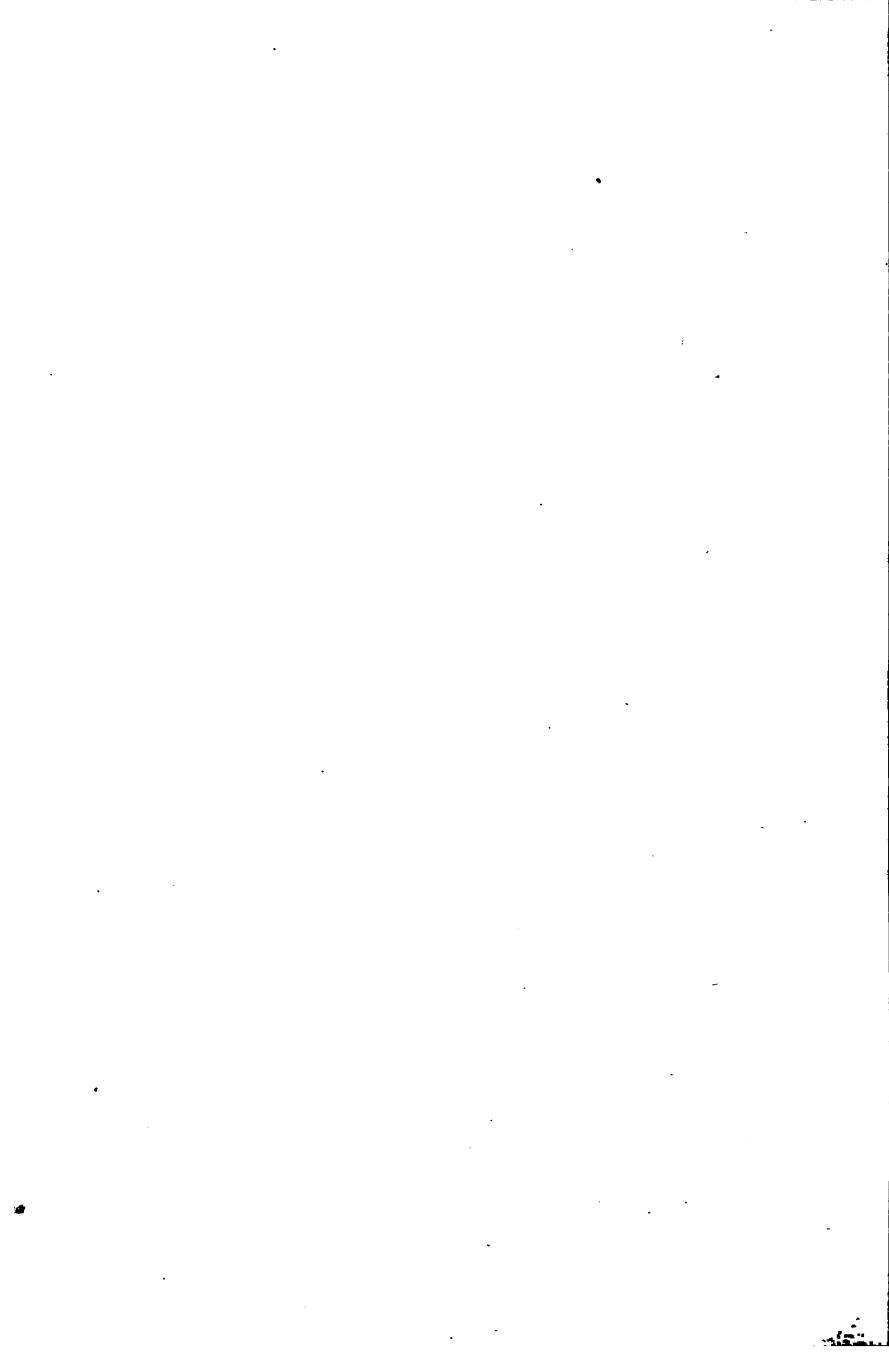
shields were immediately hoisted and the volley returned in good earnest. After the first few minutes the Bangala found the range a little too close—the weapons of Stanley's force being much superior to their own—and retreated a short distance; had they not done this they might have been victors. But at a longer range the rifles of the expedition were still able to inflict fatal wounds, whereas the guns and slug-ammunition of the Bangala could do comparatively little harm at a hundred yards' range. Nevertheless they fought stubbornly for five hours, and it was not until they had lost a great number of men, including their chief, that they retreated to the banks and allowed the brave but sadly buffeted navigators to pursue their way.

These Bangala were at that time the strongest tribe on the river. They fought well and were not afraid of travelling long distances. Consequently they were known for a great distance along the river, and had strengthened their position by alliances with the most powerful chiefs. They were also the great traders of the Upper Congo, and in this capacity gained an experience which made them appear even more important to the feebler tribes. It is worthy my noting here that, when Stanley was founding the Free State, he lost no time in concluding a friendship with them; and that ten years later, when ascending the river on his march to relieve Emin, he found the most important Free State settlement on the Upper Congo garrisoned by a police force of Bangala! The savage, reckless, bloodthirsty Bangala—civilised down into policemen! And yet a hundred changes as great as this have occurred on the Congo since Stanley first fought his way down that river.

On February 19th, while journeying by the left bank, the mouth of a large river opened on their left. Its current was strong and its waters had a very dark appearance; so dark that it was noticeable for a hundred miles below in the lighter mud-colour of the



A CONGO VILLAGE.



Congo river. This darkness was no doubt due to its upper course passing over dense masses of rotting vegetation ; it is observable in many rivers in tropical regions. The river, however, was the Ikelemba, at this time more than half a mile in width. Stanley had now recrossed the equator and was travelling south-west. Soon after passing the Ikelemba, a range of hills appeared on the left bank, and these were named the Levy Hills, after the proprietor of the *Daily Telegraph*. A little later, the river narrowed to rather over two miles, and the land on either hand became more lofty. Bolobo lay on the left bank, with its fertile and thickly settled hills, and on the right a high grassy down rolled away from the river, billow behind billow.

On March 9th the expedition was attacked for the last time in its downward journey. While it lasted the fight was a desperate one, and fourteen of Stanley's men were wounded. It was the thirty-second pitched battle in which they had been engaged since they left Nyangwe.

On March 12th they reached a part of the Congo which widened out into an almost circular lake, while on the north the land rose into high white cliffs topped with grass. Pocock exclaimed that it was just like a pool, and suggested that it should be called "Stanley Pool," the name which it has borne ever since. The high white cliffs—so like a bit of England, as he said—were called the "Dover cliffs." Here they met with a party of the Bateke, who were the inhabitants of the surrounding country ; and these men told them that below the pool were many great falls, and that they would be unable to navigate them in their boats. After his experience of the Stanley Falls the great explorer felt that he had indeed his work cut out before him, for, since that memorable time, his party had been much weakened by disease and death. On the 16th he reached the first of the thirty cataracts which go to make up that wild strip of rapids and

falls, which begins at Stanley Pool and only ends just above Vivi. With the greatest difficulty—owing to the want of food—his followers cut a path and dragged their canoes beyond the first cataract. Here and



RAPIDS OF THE LOWER CONGO.

there they were able to tow them along the smoother parts, but this was very dangerous work, and several men met with severe accidents while working on the slippery rocks. Stanley himself fell down into a hole some thirty feet deep, but luckily sustained little

injury. At one of these smooth but rapid stretches, the canoes embarked to float down to a sandy beach just above some high falls. Unfortunately one of them got too far out in mid-stream, and was swept down by the treacherous tide over the falls. Those who were standing on the beach saw it leap over the fall, and then whirled round and round by the seething waters, and finally drawn in by the whirlpool. When it was thrown out, many yards below, there was no one clinging to it.

Among those lost on this occasion was young Kalulu, who had been Stanley's page for several years. Kalulu had been given to him at Unyanyembe when he was searching for Livingstone, and had since accompanied his master to Europe and America. Stanley felt his loss deeply, for Kalulu had been more to him than an ordinary native servant. When fever had prostrated him Kalulu it was who nursed him tenderly as a woman. When, wearied with the day's march, he sank down upon the ground, Kalulu it was who brought him the refreshing cup of coffee. When slumbering heavily, as only men slumber who have toiled and spared not, Kalulu it was who had roused him at the morning hour and brought him a cup of chocolate, a handful of bananas. And now it was Kalulu who, through an accident which might have been easily averted, was swept to death over these terrible falls and found a final resting-place in some silent pool below.

Day after day the boats were slowly hauled along the shore, or towed from the banks, and seldom a day passed but what some accident happened either to man or boat. In one place, where the rapids did not seem so wild, Stanley embarked in the *Lady Alice* and navigated that long stretch of wild waters between overhanging cliffs which he afterwards called the "Lady Alice Rapids." The boat flew along at a furious rate, the oars were only of use in steadying her, and the high cliffs overhead seemed, so fast were

they going, to be rushing up the stream. Let me quote from Stanley once more:—"A sudden rumbling noise, like the deadened sound of an earthquake, caused us to look below, and we saw the river heaved bodily upward as though a volcano was about to belch around us. Up to the summit of this watery mound we were impelled, and then, divining what was about to take place, I shouted out 'Pull, men, for your lives!' A few frantic strokes drove us to the lower side of the mound, and before it had finished subsiding and had begun its usual fatal circling, we were precipitated over a small fall, and sweeping down towards the inlet into which the Nkenke cataract tumbled, below the lowest lines of breakers of the Lady Alice Rapids. Once or twice we were flung scornfully aside, and spun around contemptuously, as though we were too insignificant to be wrecked; then, availing ourselves of a calm moment, we resumed our oars, and soon entering the ebb-tide rowed up river, and reached the sandy beach at the junction of the Nkenke with the Livingstone (Congo)."

Their progress was indeed slow; in thirty-seven days they only advanced thirty-four miles!

Stanley now determined to transport his boats across the high table-land to the north of the river, and although this involved an enormous amount of labour, he succeeded in doing so for a considerable distance, re-embarking several miles below. The next incident of interest—of a sad interest indeed—I will quote from my own short account of Stanley's wandering life. "On arriving at the Massassa Falls, Stanley pitched his camp on the cliff commanding the river, leaving the canoes to work their way down stream, from rock to rock, as fast as they could. Frank Pocock, who was to follow him to the camp, by some strange fatal perversity insisted on going with the canoes to the falls, and then, as if urged to his fate by some irresistible impulse, declared his intention to shoot them. Too late he realised the full danger. The

canoe was caught by the rushing tide, flung over the falls, tossed from wave to wave, and then dragged down into the swirling depths of the whirlpools below. The crew struggled to the surface; the insensible form of Pocock was shot up by the eddy, only to be sucked in again and never more seen! The men were rescued, but the 'little master,' as he was called, had gone from them for ever.

"To Stanley the blow was crushing. He mourned for him as a brother. 'Thirty-four months,' he wrote, 'had we lived together, and hearty throughout had been his assistance, and true had been his service. The servant had long ago merged into the companion; the companion had soon become a friend. . . . As I looked at the empty tent a choking sensation of unutterable grief filled me. The sorrow-laden mind fondly recalled the lost man's inestimable qualities—his patient temper, his industry, cheerfulness, and his tender friendship—it dwelt upon the pleasure of his society, his general usefulness, his piety, and the cheerful trust in our success with which he had renewed our hope and courage; and each new virtue that it remembered only served to intensify my sorrow for his loss, and to suffuse my heart with pity and respect that, after the exhibition of so many admirable qualities, and such a long, faithful service, he should depart this life so abruptly, and without reward!' To such a tribute to Frank Pocock's worth nothing need be added."

For more than four months had they laboured to bring their boats down the Congo Canon; yet in all that time they only covered about a hundred miles. The history of that terrible journey is one long chapter of accidents. And to the dangers of the way was added the peril of famine, for such food as the natives would sell them cost so much money that they were left almost beggars. The wretched Wangwana toiled on, groaning aloud, their bones seemed hardly covered with flesh, no longer was their tread elastic, no longer

could they walk erect. Fevers innumerable had worn their strength away, and a continuous strain upon their minds had resulted in a total loss of spirit and courage. One thought only could they think, with one idea only did they move; they had to reach the sea—the great sea, where dwelt their friends—in a very short time or they would die.

On reaching Isangala and its falls, Stanley struck across country in the direction of Boma, where he heard there were white men. It was only a few days' march now, that is, if they had been strong. But many of his men could hardly lift their limbs, and the women, brave as they had been throughout the journey, seemed at any moment likely to fall down, not to rise again. Stanley came to the conclusion that the only thing to be done was to send on to Boma for help, and he thereupon wrote a letter and directed it to "any gentleman who speaks English at Boma."

Uledi, the ever-faithful Uledi, volunteered to take it, and Stanley, nothing loth, gave him permission. Uledi, with one companion, started off on his mission. Meanwhile the party struggled on as best they could, with weary limbs and haggard faces—a starving people. It was all that Stanley could do to get them to move at all; they threw themselves down upon the ground and quietly awaited death. And so the days were passed; Stanley watching his starving, dying people with all the pity which helplessness gives. At last, on the third day after Uledi had gone, he was seen to come running over the nearest hill, holding a letter high in the air, and waving the fact of good news. The letter was a reply from some English traders, welcoming Stanley and his expedition to the west coast, and informing him that they were sending a sufficient quantity of provisions.

The excitement at Uledi's return with such news had hardly ceased, when the most welcome caravan sent from Boma arrived. The rejoicing was great

indeed, and without delay the poor famished fellows feasted on the good food. But as soon as they had finished this first meal they declared themselves ready to follow their master to the sea—anywhere: so brave had their long voyage down the Congo made them.

On the next day, August 7th, the march was resumed, and two days afterwards the whole party entered Boma, warmly welcomed by the European residents. The march across Africa was at an end.

It is needless for me to dwell on the importance of the discoveries which Stanley had made: his descent of the Lualaba, and his identification of it with the Congo, were enough to bring fame to any man. It was the most remarkable journey ever made in Africa, and it is just as well to separate it from the great discoveries he had already made east of the Tanganyika.

Future generations will continue, of course, to connect Stanley's name generally with Central Africa. But I think we may take it for granted that he will live in history rather as the first navigator of the mighty Congo, and as the founder of that great Free State which has been established in its basin. Stanley is not to be thought of apart from Africa, and we cannot treat of Africa without realising what Stanley has done for it. In ancient times men were often given surnames appropriate to the deeds they had achieved. Reverting to their methods for the present occasion, I think we may well distinguish the intrepid explorer, who bears so historic a name, as Stanley Africanus.

I should like to add that Stanley, although offered a passage to Europe from the mouth of the Congo on a Portuguese steamer, resolved to take his travel-worn followers home to Zanzibar. They were conveyed to St. Paul-de-Loanda by a Portuguese gun-boat, and thence by a British man-of-war—H.M.S. *Industry*—to the Cape. After a stay of a few days at Capetown the *Industry* carried them on to Zanzibar, where they arrived safely on November 26th, 1887. The next few days were spent in paying out wages, in handing

over to their relatives the moneys due to those who had died, and in bestowing rewards on the most deserving. This done, the Anglo-American expedition, which for three years had been engaged in the most remarkable discoveries and the wildest of adventures, ceased to exist. But the fame of it still lives.

NANSEN AND THE FIRST CROSSING
OF GREENLAND



FRIDTJOF NANSEN.

NANSEN AND THE FIRST CROSSING OF GREENLAND.

THE discoverer of Greenland gave it the name of "Hvidsærk"—that is to say, "White Shirt." It was a good one. The scant green herbage, which springs up in the southern portions of the island during the month or so of summer, is altogether too insignificant to be a worthy sponsor for a country so large and so arctic. It has been called—Admiral Sir Erasmus Ommanney is, I think, the author of the title—"The White Continent." This is poetic, at least, and while we hear so much of its antithesis "The Dark Continent" it will have a vogue. White, at any rate, is Greenland; you may travel for weeks, as Dr. Nansen has proved to us, without seeing a single dark or black speck. But it can hardly pass for a continent; its known area not reaching three-quarters of a million of square miles. So Greenland, one may suppose, will it remain; and, after all, the green herb fit for the use of man, scant though it may be, is worth all the ice and snow and glacier which mantle that mysterious and hidden land, and which make habitation so impossible, and journeys so perilous, that, although discovered nine hundred years ago, it was only the other day that they were crossed from coast to coast.

Yet—so wonderful are the ways of nature and so chequered the history of our earth—the time was when this land of perpetual frost, this land where you cannot find one single tree, was lapped by the warm

waters of a tropical ocean, and covered by the dense forests of an equatorial country. We know this, not because man has left a record of it, for man had not then made his appearance on this planet, but because we find it recorded in the autobiography of the earth—a book which, though often difficult to read, contains nothing but fact. Geology tells us, in short, that Greenland was at an early period a great swampy forest with huge trees, which we prove by now finding coal-beds there; and at a later period, ferns, pine-trees, fig-trees and bay-trees, the palm, the walnut, the maple and the birch, the chestnut, the plane and the beech, among trees; and the vine and the smilax, among climbers, must have flourished in Greenland, for we find their remains fossilised in the tertiary strata which have escaped from destruction during the “Great Ice Age”—an age which may be said to still exist for that country. An eruptive flow of basaltic rock covers the softer sandstones, and it is only here and there that we find them so revealed as to be able to decipher from their character the record of another Greenland worthier the name.

To-day, however, Greenland is wholly arctic. Its east coast is perhaps the wildest shore in the world. Great mountain peaks of eternal ice send down vast glacier-rivers to a sea which is a heaving, crashing mass of ice. From out of the polar basin there draws a current, colder than death and as swift to run, bringing on its bosom a mass of polar ice. It sweeps along this eastern shore of Greenland like a river in flood; it catches the ice-floes in its sweep and crashes them together again and again, and crushes them into dust. But those that come rushing with it take the place of those that are destroyed, and so, day after day, the current races on, a hundred miles wide, down the Greenland coast, past its southernmost point so aptly named “Farewell,” and then with slackened pace, with much of its ice-mantle torn away, it joins

the sister current which runs down Davis Strait; and their united streams moving more and more slowly but under a thickening pall of fog, beset the coasts of Newfoundland, Nova Scotia and New England. Thence, creeping sluggishly along the Atlantic coast of the United States, it becomes gentler and warmer, and so unlike its former self that off Cape Canaveral, pressed by balmy, pine-scented Florida on its west, and by the soft equatorial trade-winds on the east, it loses itself in the warm and placid waters of the Gulf Stream.

But there is no such soft transition to be met with on the mainland. There snow falls every month in the year save that of July; there the average temperature never reaches so high as freezing point. The "Inland Ice," as its owners, the Danes, have called it, clothes the land like a garment; and in the interior, where it rises from eight to ten thousand feet above the level of the sea, the temperature falls to 80° and even to 90° below freezing point—a cold so intense that we, of a temperate zone, cannot possibly realise it. Across these lofty peaks and high plateaux the most fearful snowstorms whirl; the wind, laden with the minutest particles of frozen snow, is so terrible that a man, unprotected, would drop before it as if he had been shot; and while these are beating down upon the venturesome explorer from above, the deep fresh snow at his feet not only makes progress so laborious as to be actually painful, but conceals the crevasse which yawns below—a silent unsearchable grave for him who slips. Little wonder that such a land had never been crossed until Fridtjof Nansen, with the hardihood of youth mated to a stout heart and strong limbs—a son of the old Vikings, and gifted with a gallant soul like unto theirs—conceived the ambition to be the first to pass over "the White Continent" from sea to sea, and—such his indomitable spirit—actually achieved that perilous task.

Others had attempted it before, but none had succeeded. In the earliest times of its history the Norwegian settlers had a fairly accurate knowledge of the interior, which must have been based on experience; but as they passed away, their knowledge passed too. Then came a period of ignorance, in which the simplest facts of its geography were unknown. In 1721 a Norwegian pastor voyaged thither in a fruitless search for the old settlers' descendants, for Eskimo were then the only people to be found in Greenland. His discoveries, however, led to enterprise of a commercial character, and even to re-settlement. A few years later the Danish governor, Paarss, endeavoured to cross to the east coast from his headquarters at Godthaab on the west coast, but he only penetrated a few miles, and on the third day returned. In 1751 Dalager started from Frederikshaab, but on the fourth day out the ice and snow turned him and his party back. Then followed Fabricius, the naturalist, and during the century many others—all of whom failed. In the middle of the present century, Rink, the naturalist, by his many writings, and especially by his pointing out that the conditions of the Great Ice Age of geology—when most of Europe and North America lay under a continuous ice-sheet—could be observed at the present time in Greenland, roused a new interest in the exploration of that country. Schaffner, our Dr. John Rae, the American Hayes, and Whymper (of Alpine fame), made more or less insignificant journeys on the Inland Ice; and the Swedes, Norden-skiöld and Berggren, pushed their way some forty miles into the interior. The Danish government then despatched expeditions in several successive years, but the result was almost *nil*. In 1883 Nordenskiöld made another attempt, and was able to penetrate nearly eighty miles and reach an altitude of about five thousand feet. Before turning back he sent two Lapps, who were in his party, and were wearing their famous "ski" or snow-shoes, on a reconnoitring

journey further inland. They probably got as far as one hundred miles from the original starting-point, and their report was to the effect that the snow and ice were as unbroken at that distance as where they had left their party. Finally, in 1886, Peary, an American, in company with Maigaard, a Dane, penetrated to a distance of about one hundred miles, and reached an altitude of over seven thousand feet, before the peculiar difficulties of Greenland exploration proved insuperable.

Now all these expeditions have one feature in common: they all started from the ports on the west coast, and set the savage and almost unknown east coast before them as their goal. As Nansen has said: "They would have all the flesh-pots of Egypt behind them, and in front the unexplored desert of ice and the east coast." Little wonder that difficulties should loom large, and that the courage of their companions—if not their own, indeed—should wane with each mile they advanced. Little wonder, in short, that each expedition should fail in turn.

It happened that, in 1882, a Norwegian sealing ship was ice-bound for some time off the east coast of Greenland, in that extraordinary current which I have already described. On board was an ardent young naturalist, who had taken his passage in the sealer in order to investigate the zoology of the arctic zone. While locked in the ice which makes that current so terrible to navigators, he obtained, from time to time, a good view of the Greenland coast, and it occurred to him that it might be possible to land and cross the Inland Ice from some point on that coast. A year later, when continuing his scientific studies at home, he heard of Nordenskiöld's expedition, and of the use which the Lapps had made of their snow-shoes or "ski." In a moment the proper way to solve the difficulty seemed plain to him. Greenland must be crossed on "ski," and, to ensure perseverance to the end, from the east coast to

the west—from the land of famine to that of plenty. This young naturalist was Fridtjof Nansen, a Norwegian; and his crude idea becoming his ambition, took shape and grew until, in 1888, it became an accomplished fact, and the Inland Ice of Greenland was crossed for the first time in history, after a series of adventures remarkable in an age which is distinguished by the magnitude of its explorations and the successes of its explorers. One of the noteworthy facts about this crossing of Greenland is the youth of the leader. Nansen was born near Christiania in 1861, and he was consequently only twenty-seven years of age when he made his famous journey. From the earliest age he was accustomed to use the ski—the snow-shoes of Norway—and in time he became an accomplished “skiløber.” When eighteen years of age he went to Christiania, there to study in the University. He devoted himself chiefly to science, and his zoological interests led him to undertake that voyage in arctic seas, which, as we have seen, eventually led, by a chance mishap, to the Greenland expedition. On his return from that voyage he obtained the position of curator of the Bergen Museum; and between then and 1888 he was engaged in those scientific studies which form so admirable an equipment for the explorer, and at intervals he was working up the subject of Greenland exploration and making known his views on the matter. At last a munificent offer from Augustin Gamél—a Danish gentleman quite unknown to Nansen—brought matters to a head. Gamél, a Copenhagen merchant who had already shown practical interest in arctic discovery, offered to give a considerable sum of money towards the expenses of the expedition. This made Nansen anxious to start as soon as he could, and he forthwith began his preparations.

In the first place, the expedition was to travel on “ski.” Now ski, though the Norwegian equivalents of the North American snow-shoe, are very unlike

them. The North American shoe, of course, is a network of gut or sinews strung to a wooden frame, and in appearance not unlike the tennis-bat. The Norwegian shoe, on the contrary, is simply a long strip of thin wood (see illustration on page 309). The word "ski" means "a thin strip of wood"; "skilöber," a user of ski—a snow-shoer; and "skilöbning," using ski, or snow-shoeing. Ski vary from six to eight or even nine feet in length, and from three to four inches in width. Under the foot—which is fastened by leather thongs or withes—the thickness of the ski may be an inch; but this rapidly decreases, and at each end the ski are not more than a quarter of an inch thick. In front they are turned up and pointed. They therefore resemble a very attenuated form of toboggan—and the capacity of the latter for passing rapidly over snow, with the least possible friction, is too well known for me to describe. Of course there are varieties of ski—some being shorter and broader than others, for example—but the description I have given is generic, and includes the majority of varieties. The ski are made of all kinds of wood—pine, birch, ash, elm, and oak being most commonly used. The under side of the ski is of course made very smooth, and sometimes strips of skin are fastened to it in order to prevent slipping when ascending the steep hill-sides of Norway, or to keep the snow from "balling" under the ski when it is wet or unduly soft.

Skilöbning is one of the national sports of Norway. Men, women, and children are all skilöbers, more or less, of necessity; for in the winter time, in paying visits or in going to church or school, ski are the easiest and swiftest means of locomotion through the forests or along the hill-sides. But skilöbning has also become a sport. Men—and women, too—cover distances in a wonderfully short time; races on ski are as swift as they are exciting. The course is often purposely carried through rough country, and over awkward places, but the experienced skilöber can

surmount nearly everything. Jumping on ski is perhaps the favourite amusement of the athletic youth of Norway. A hillside is descended at a great rate; suddenly there is a bank or break—it may be natural, more frequently it is artificial—the skiløber leaps as he rushes down on to the edge, and then with a marvellous bound he flies through the air for fifty, sixty, or seventy feet! Alighting on the slope below, he glides down the rest of the hill at a furious rate, and on reaching the level slackens pace, and finally re-ascends the hill to repeat the performance. It is an exhilarating variety of tobogganing.

As men get very expert in the use of ski, and can travel over all conditions of snow at a considerable pace, it is not surprising that Nansen should have decided to attempt the crossing of Greenland on them, and to have none but experienced skiløbers in his party. His companions were five in number: three Norwegians and two Lapps. Otto Sverdrup, a captain in the mercantile marine, who had seen much service in the course of a few years, and was distinguished for pluck and daring; Oluf Christian Dietrichson, a lieutenant in the army, and who added to the ardour of a sportsman the invaluable qualities of a surveyor and a meteorologist; and Christian Trana, a sturdy and plucky peasant, who—like so many of his race—had been some years at sea, were, together with Nansen, the Norwegians of the party. The Lapps were named Ravna and Balto; the former a mountain Lapp, and, though one of the genuine “reindeer and tent” Lapps, a trifle inclined to be timid in bad weather; and the latter a river Lapp, with some Finn in him, who, like his kind, had divided his time between foresting and fishing, and was bold, strong, and intelligent. Nansen had been anxious to secure some Lapps, not only because they were well-known to be excellent ice-men, but also because he had intended at one time to take reindeer to draw the sledges. He finally decided that each of

the party should draw a light sledge—food for the reindeer being a difficulty.

As Nansen's expedition was in every respect unlike any former arctic expedition, it becomes necessary to devote a short space to a description of its equipment. For example, there is the important matter of the sledge. In former expeditions—with the exception perhaps of Greely's—unnecessarily large and heavy sledges have been used. On one or two occasions toboggans have been utilised, but their most serviceable qualities were largely lost by adding narrow runners, which caused needless friction. Nansen determined to apply the principle of the ski to his sledges, and accordingly mounted them on what was to all intents and purposes a strong pair of ski. Both ends were turned up, thus giving the sledge a second "bow," to be used should the other be injured or smashed. The framework of the sledges consisted of light but strong ash-rods and bamboos, lashed together, to save the wrenching of nails or pegs, and to give an additional pliancy to the whole sledge. Each sledge was about twenty inches broad, and rather over nine feet in length. To save the weight of wood the bottom consisted of only four transverse rods, the intervening spaces being filled with a light network resting on them, and fastened to the two long side rods. The weight of each sledge, unloaded, was twenty-five pounds.

Next in importance was the boat in which the ice-bearing current had to be crossed. It was, of course, strongly built, and was nineteen feet long and six feet broad. Next came the sleeping-bags—two being taken, each to hold three sleepers. They were made of reindeer skin, and proved indispensable in the intense cold of the interior. Each bag had a large flap, which was buckled down and thus kept the sleepers, who also benefited by each other's warmth, as comfortable as circumstances allowed. As to clothes, it is curious that with one or two exceptions no furs

were taken. Thick woollen underclothing, and plenty of upper clothes of the stoutest Norwegian homespun, proved quite as warm and more wholesome than furs. The coats had large hoods attached, and the caps ample flaps. Extra hoods were also taken. They wore stout Norwegian boots, with the soft leather sole turned over the "uppers"; the Norwegians put on goat's-hair socks over their woollen stockings, and the Lapps encased their feet in a sedge-like grass—both socks and sedge having the property of so attracting moisture as to keep the feet quite dry. This is an invaluable precaution against frost-bite. Coloured spectacles to protect the eyes from the glare of the snow, and warm woollen and fur gloves, completed their personal outfit. A tent and a spirit cooking stove were taken, and the provisions chiefly consisted of dried meat, dried meat biscuits, ordinary biscuit, meat-powder chocolate (containing 20 per cent. of meat powder), tea, coffee, cheese, condensed milk, butter and jam. No alcoholic liquor was included (Nansen being convinced that it was of no good, either medicinally or as an inspirer of "Dutch courage"), and the smokers of the party were only to be allowed one pipe on Sundays and one or two other special occasions. Two double-barrelled guns, for ball and shot, scientific instruments of excellent quality, a photographic camera, a medicine chest, and a variety of small *impedimenta* in the shape of axes, knives, rope, staves, note-books, matches, binoculars, etc., etc., completed the outfit of the expedition.

Having steamed from Christiania to Leith, the party embarked at the latter place on the Danish steamer *Thyra* on May 9th, and by way of the Faroe Islands made Iceland without mishap. Staying a few hours at Reykjavik, the capital, Nansen started for Isafjord, whence he intended to sail to the Greenland coast, but as the ice was unusually bad he at first put in at Dyrafjord. Finally, however, he moved on to Isafjord, and here he met the *Jason*, a sailing ship, with whose

owners he had made an agreement that she should, if possible, land him and his party on the east coast of Greenland—a distance of barely two hundred miles. What Nansen intended to do when this was done he described so well at a meeting of the Royal Geographical Society that I will quote his words on that occasion:—

“I thought the only certain way was to penetrate the floe-ice, and land on the desolate and ice-bound east coast between lat. 65° and 66° N., and make that the starting-point for the inhabited west coast; in that way we should, as it were, burn all bridges behind us, and it would not be necessary to force the men forward, for they would certainly have no temptation to return, whilst in front of us we should have the west coast inviting us with all the comforts of civilisation. The men had no choice, only forward. Our order was—death or the west coast of Greenland.”

Such pluck deserved all the success that rewarded it. Well might Sir Erasmus Ommanney—a veteran who had served under Ross in 1836—and such arctic explorers as Sir Leopold McClintock and Sir Allen Young, vie with one another in praising his courage as much as his skill. Well might the first compare him—the explorer of the White Continent—to the great explorer of the Dark Continent; well might the second style him the worthy descendant of the hardy Norsemen!

On June 4th the *Jason* sailed from Isafjord, and on the next day reached the floe-ice of the Greenland current. And what, the reader may ask, is floe-ice like? Perhaps I should allow Nansen to answer that question:—“As to its large features, it is just their overpowering simplicity of contrast which works so strongly on the observer’s mind: the drifting ice, a huge white glistening expanse stretching as far as the eye can reach, and throwing a white reflection far around upon the air and mist; the dark sea, often showing

black as ink against the white; and above all this a sky, now gleaming cloudless and pale-blue, now dark and threatening with driving scud, or again wrapped in densest fog—now glowing in all the rich poetry of sunrise or sunset colour, or slumbering through the twilight of the summer night. And then, in the dark season of the year, come those wonderful nights of glittering stars and northern lights playing far and wide above the icy deserts, or when the moon, here most melancholy, wanders on her silent way through scenes of desolation and death. In these regions the heavens count for more than elsewhere; they give colour and character, while the landscape, simple and unvarying, has no power to draw the eye.

“Never shall I forget the first time I entered these regions. It was on a dark night . . . and ice was announced ahead. I ran on deck and gazed ahead, but all was black as pitch and indistinguishable to me. Then suddenly something huge and white loomed out of the darkness, and grew in size and whiteness, a marvellous whiteness in contrast to the inky sea, on the dark waves of which it rocked and swayed. This was the first floe gliding by us. Soon more came, gleaming far ahead, rustling by us with a strange rippling sound and disappearing again far behind. . . . As I looked I heard a curious murmur to the north, like that of breakers on a rocky coast, but more rustling and crisper in sound. . . . The sound came from the sea breaking over the floes while they collided and grated one against the other. . . . We drew nearer and nearer, the noise grew louder, the drifting floes more and more frequent, and now and again the vessel struck one or another of them. With a loud report the floe reared on end, and was thrust aside by our strong bows. Sometimes the shock was so violent that the whole ship trembled, and we were thrown off our feet upon the deck.

“Then one evening it blew up for a storm, and, as

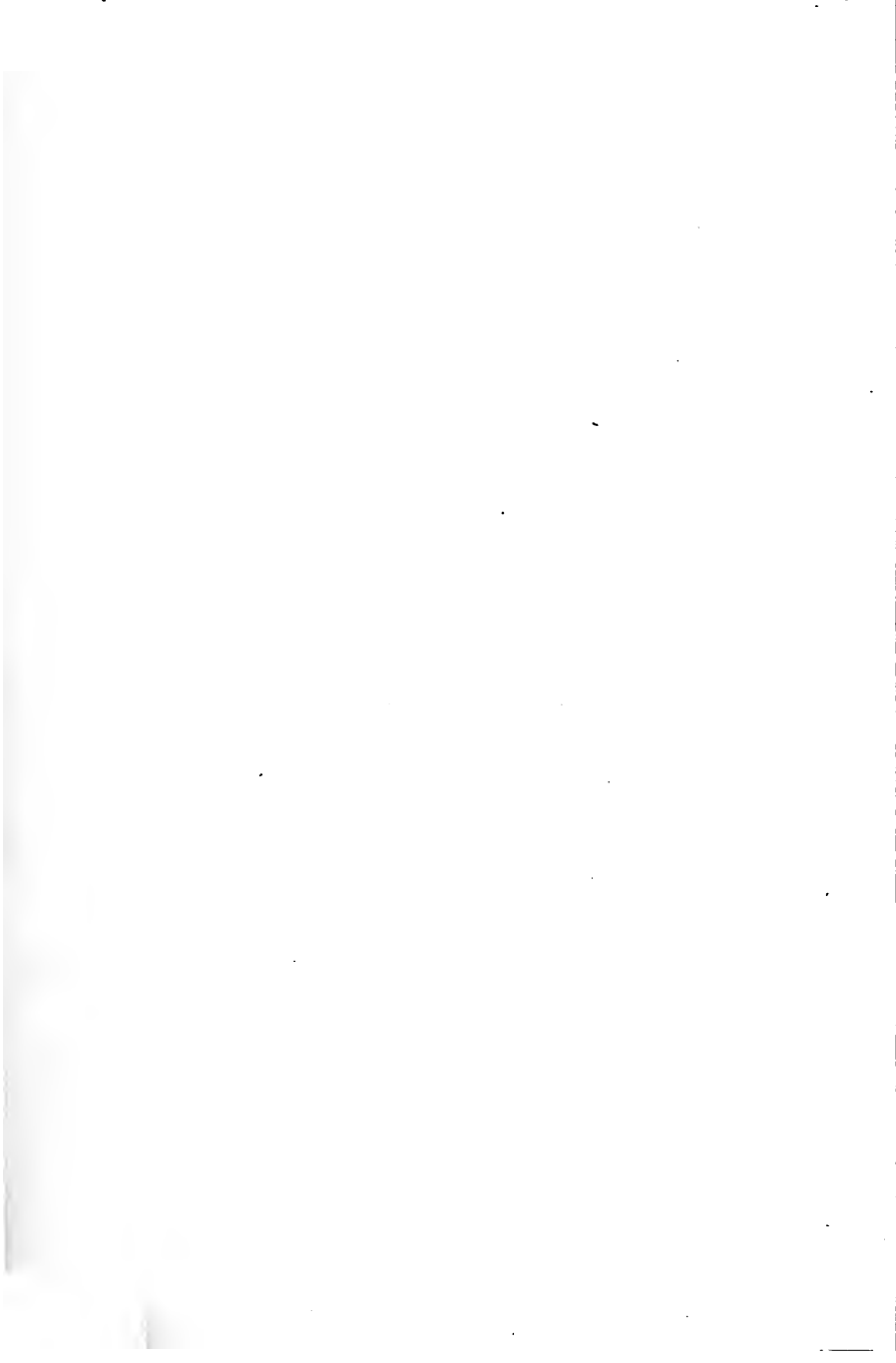
we were tired of the sea, we resolved to push into the ice and ride out its fury there. So we stood straight ahead; but before we reached the margin of the ice the storm fell upon us. Sail was still further shortened till we had but the topsails left, but we still rushed inwards before the wind. The ship charged the ice, was thrown from floe to floe, but on she pushed, taking her own course in the darkness. The swell grew heavier and heavier . . . the floes reared on end and fell upon each other; all around us was seething and noise. . . . We bored steadily inwards into the darkness. The water seethed and roared round our bows; the floes were rolled over, split in pieces, were forced under or thrust aside, nothing holding its own against us. Then one looms ahead, huge and white, and threatens to carry away the davits and rigging on one side. Hastily the boat which hangs in the davits is swung in on to the deck, the helm is put down, and we glide by uninjured. Then comes a big sea on our quarter, breaking as it nears us, and as it strikes us heavily we hear a crash and the whistling of splinter about our ears . . . a floe having broken the bulwarks on the weather side. The ship heels over, we hear another crash, and the bulwarks are broken in several places on the lee-side too."

Such is the ice-bearing current off the coast of Greenland. Such the waters through which Nansen had now to force his way.

Greenland was sighted for the first time on June 11th—"high, jagged mountain tops"—but it was not for some weeks that the ship could get in near enough to land him. On July 16th, when near Cape Dan, a little south of the arctic circle, the ice-belt narrowed down to about fifteen miles; and, selecting a favourable inlet, Nansen and his little party left the ship in two boats—one belonging to the *Jason*. From here they could see the white slopes of the Inland Ice far behind the high peaks which close around Sermilik Fjord. Everything seemed favourable to a speedy



THE EAST GREENLAND COAST.



landing, and the boats pushed rapidly through the loose ice.

It was not long, however, before the current was felt. High peaks of ice lying to the west seemed to draw nearer: rather, the laden boats were travelling down the current more quickly than the ice. Now and again the water raced along with floes, and the boats ran imminent risk of being jammed. Dark clouds gathered overhead and rain fell. And so the first night in the drifting ice was passed. With dawn, the weather held up for a little. A lane of good water opened here and there; the land seemed closer than ever; they began to look for the spot on which they should disembark. Suddenly the ice packed, floes crashed and ground together, and the boats were hastily dragged on to the surface of the nearest ice. But quickly as it was done, one of the boats had a hole cut through her, and she had to be unloaded and repaired. And while this was done the rain again came down, and the land was hid from them by the mist. They had been working for fifteen hours, and so they pitched their tent and lay down to sleep, one keeping watch, each in his turn.

But there was no more opening of the ice. They were in mid-current and were swept away southward, and farther and farther from the land. And the rain fell and the fog thickened, while the belt of ice got ever broader and broader. Clearly they were in a sad strait. But on the 19th the weather brightened, and they renewed their efforts to approach the land. The ice opened a little and thus helped them for a time, but soon it packed again, and again they were forced to haul up their boats on it. And now the noise of the ocean breakers on the margin of the ice-belt could be heard, and farther were they than ever from the land. Soon the floes began to rock and sway, and a heavy swell made the ice snap like gun-shots. The water broke over the ice and washed

it bare. The floe on which they were encamped split in two—perilously near their quarters. With difficulty they moved to a neighbouring and larger piece of ice. But the waves rolled in upon them here, and the Lapps, crouching in one of the boats, began to prepare for another world. Yet, in strange irony, the sun came out of the banks of cloud and brought with it bright, beautiful weather.

As they gradually approached the surf, they saw it leaping high over the ice and crashing down upon it with terrific force. Nansen, with great coolness, ordered a short sleep; work enough for all their strength would soon come. So wearied with their watch were they that in a few minutes they were all quietly sleeping—and the breakers roaring louder and louder as they swept nearer and nearer! Soon, too, the floe began to heave and roll, and the water washed within a foot of the tent. A lofty berg tottered overhead, and the boats began to yaw in the heavy wash. Then came a wonder. Without any visible cause, the floe on which they were just riding into the surf of the ocean, into very possible destruction, stayed, shivered, and then swept, like a human being frightened at last, at a rapid pace back towards the land. Such was the report of Sverdrup, the "man on the look out," during that fearful time. When the voyagers awoke they found themselves many miles away from the breakers and still retreating toward the land.

This was the 21st, and it may be here said that it was on this day that they began to keep a meteorological diary—began, that is, to record temperature, air-pressure and moisture, wind and cloud. Dietrichson kept this record throughout the journey, and much credit is due to him for its completeness under circumstances which might well have broken the patience and regularity of even the most habitual observer.

From this date till the 28th their life on the

drifting ice went on with but little variation. Sometimes they drifted nearer the open sea, once at least they were on the verge of entering into a life-struggle with the thundering surf; then again the floe brought them towards the land, and the opening of the ice raised hopes, to be shattered in a few hours by another pack. One night a polar bear came bounding towards the camp, but turned and fled in obvious terror when the dark figures rushed from the tent. On the night of the 28th, however, there came a change. The floe swept toward the coast, the ice opened up, and in the morning they found themselves near the land. Rapidly loading the boats they pushed off, and with fairly open water all the way, landed, on July 29th, on the east coast of Greenland.

In his address to the Geographical Society—an address which was listened to with breathless interest by an audience well accustomed to the adventures of explorers, Nansen said: "We landed at Anoritok, which is, however, not very far from the south point of Greenland, and is situated $61\frac{1}{2}^{\circ}$ N. lat., consequently about two hundred and fifty miles south of the place where we intended to begin our journey across the continent. It was now very late in the season; the best time of the short Greenland summer had passed away, there was but little left. It would have been very easy to reach the Danish settlements on the west coast near Cape Farewell, and northwards the floe ice was pressed tightly against the coast all the way. We had to choose here between certain rescue in the south, and the accomplishment of our plans, or perhaps death in the north. If I had asked my two Lapps I was sure of the answer—it would have been southwards on any condition; but if I had asked my brave Norwegians I was just as sure that the answer would be 'northwards'—we must not on any account give up our plans. None of them were, however, asked: arrived inside the ice the boats were steered northwards without any order,

there were no thoughts of giving up our plans yet, there was still left time enough to cross Greenland if we did 'our best.'

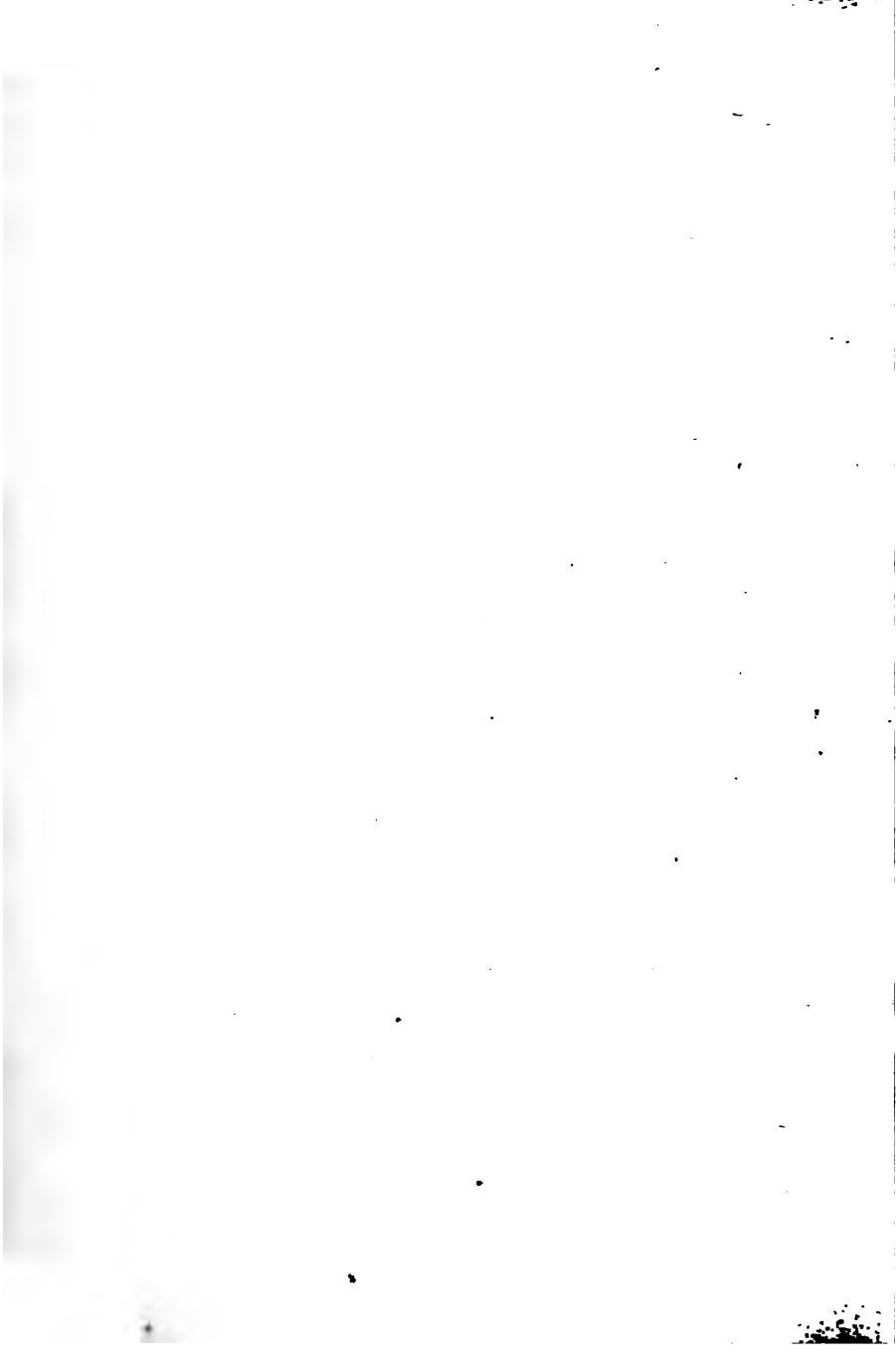
Northward along the coast, therefore, they went; finding the ice very difficult at times. It was a case of pushing and perseverance in pushing; fortunately, they were the right stuff for this sort of work. Off Cape Adelaer the ice was particularly bad, but they got through, and on the 30th came in sight of the great glacier of Puisortok. Here, too, for the first time they met with the Eskimo. As they were to see a good deal of these people before starting for the interior, a brief description of the Eskimo of the east coast may be of interest.

In the first place they are heathen. Next, they are a very friendly, amiable and honest people, who would be all the better for a little more civilisation, perhaps, before they are evangelised. Their habits are simple though hardly clean. Their outdoor costume—men and women alike—is generally composed of a pair of rather tight breeches, a short jacket, and a pair of the well-known high Eskimo boots—the "kamik." All these are made of sealskin. As the result of an occasional pilgrimage to the Danish colonies on the southwest coast, a few may be seen wearing, on festal days, thick woollen jerseys, or even some second-hand European clothing. Indoors, men, women and children are nearly naked: the merest strip of sealskin being all that is considered sufficient. And, considering the heat, the close oily smell and the overcrowded condition of an Eskimo's tent, it is not, perhaps, to be wondered at. Of course they have no sense of immodesty in being thus unclothed.

Their tents are roughly circular in form, and the top and sides are made of double layers of sealskin stretched over poles. Four or even more families crowd into each tent, and a family may comprise the man, one or two wives, and half a dozen or more children. Half of the interior is occupied by a broad



ON THE FLOE-ICE.



low bench or platform, which, made of planks and covered with many sealskins, acts as bed, sofa, chair and table for the whole family. It is divided into three or four parts by a plank, and each part is inhabited by a family. Thus eight or nine people will pass their indoor life in a space some four or five feet square. The train-oil lamp which serves for fire and light burns day and night. Its wick is dried moss, and the oil merely melted blubber, just as the lamp itself is nothing more than an open stove dish. Over it hangs the stove-pot, which serves the Eskimo for an oven.

The natural complexion of the Eskimo is pale yellow—undoubtedly. But the dark ochreish hue which their skins present is due to dirt. That is the simple truth—due to dirt. This dirt, too, is not freshly acquired: it is of old standing; it is perfectly at home. After a while, however, it gets—like old port—a fine crusted appearance, and then it crumbles away here and there. This untoward circumstance is deferred as long as possible by the use of cosmetics, or, to be candid, of blubber. It is sometimes urged against the European woman that you can “see the powder” on her face; if the blubber is not visible on the countenance of the Eskimo at half a mile, then—well, then all travellers are mistaken. But to be perfectly just, it should be added that some vain young Eskimo belles wash not infrequently—only the process is such that it is indescribable.

Still, on the whole, these east coast Eskimo are a pleasantly unsophisticated lot. They live in a happy-go-lucky way, and do not quarrel one quarter as much as nerve-strained and civilised Europeans. Their broad fat faces are a picture of contentment; the great bulging cheeks—across which you could lay a foot-rule and not touch the sunken and half-hidden nose—give them an extremely placid and well-fed appearance; the dark Mongolian eyes are bright enough; the straight black hair looks often neat, and their feet

and hands are small and comely. Of a certain beauty these Eskimo have their share; and, in any case, their ready smiles and laughter atone for any deficiency in the matter of classic lines and mould.

In addition to his tent and small amount of furniture, the Eskimo has his canoe—his “kayak”—and his weapons. The kayak is a very personal piece of property: it is sacred to its owner. It is a long and extremely narrow canoe, made of light wood covered with sealskin. It is as fragile as biscuit almost, but the Eskimo can perform wonderful journeys in it, and manage it with the most consummate ease. It is the great hunting craft of the race, and is the property of the man, just as the large skin-covered boat—the “umiak”—may be said to be relegated to the women. At any rate, no Eskimo who holds himself in esteem will pull or paddle the umiak: that is woman’s work. When shifting camp the umiaks are laden with tents and other *impedimenta*, but the women pull them. An Eskimo male, however, steers these boats; a duty which may be frequently interrupted by the pleasure of hurling a harpoon at a passing seal.

The weapons of the Eskimo are few enough, but they keep them in excellent order. Sometimes, too, their harpoons are pointed with the tusk of a narwhal and ornamented with sundry pieces of bone. A horn of snuff is so usual an addition to a man’s outfit that it may be considered invariable, and the snuff they take—mixed as it is with powdered quartz—is a very strong titillator.

After a short stay among the Eskimo, Nansen started off on his northward voyage, and after various delays, owing to ice and weather, arrived at Umivik on August 10th. From here he decided to make across the terrible Inland Ice, and shape a course which would bring him to the Danish settlement of Christianshaab, on Disko Bay. The west coast, for which he was about to steer, is divided by the Danish

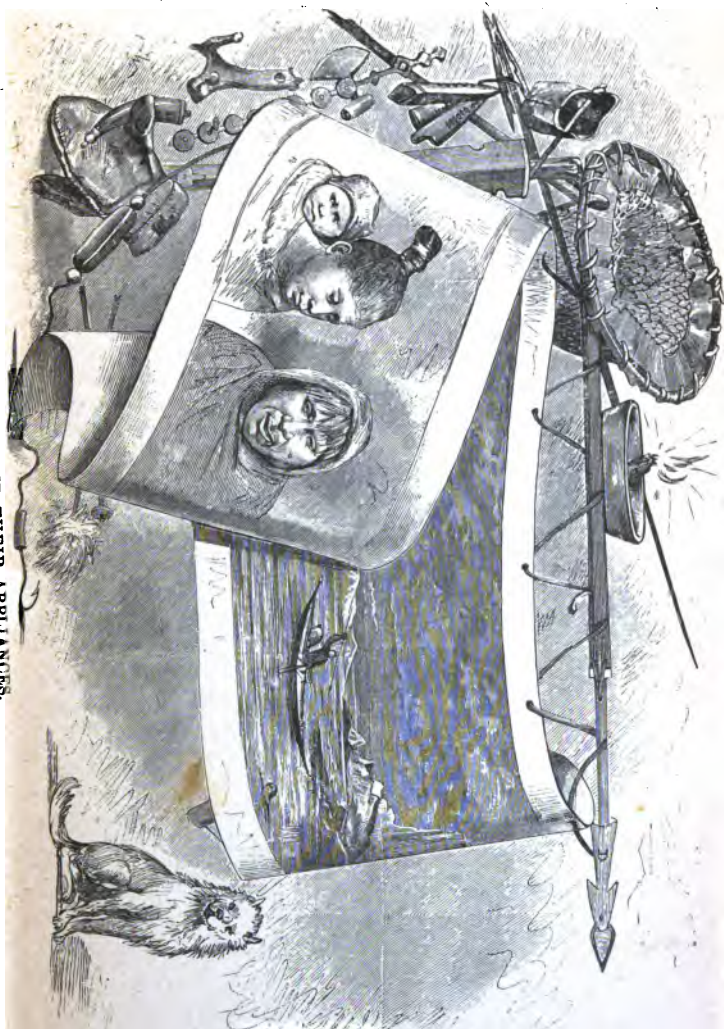
government into two provinces or inspectorates. The settlements in the southern inspectorate begin with Fredericksthal, quite close to Cape Farewell, the southernmost point; northward about one hundred miles lies Julianshaab, where there are many remains of the old Icelandic colonies; about two hundred miles further north is Frederickshaab, which at another considerable interval is followed by Lichtenfels. More than a hundred miles north of this is Godthaab, the capital of south Greenland, or more correctly, of the southern inspectorate. Godthaab is situated on a peninsula at the mouth of a deep fjord, whose waters are covered with numerous islands. Northward of Godthaab is Zukkertoppen, which obtains its name from the great sugar-loaf mountain near it, and which is an arctic parallel of the famous Pão d'Assucar of tropical Brazil. At Holsteinborg, just within the arctic circle, we come to the most northerly settlement of the southern inspectorate, and thence pass to the northern. In Disko Bay, which is the most important inlet in a coast continuously pierced by deep fjords, there are two moderately important settlements on the mainland—Christianshaab and Jakobshavn—and on Disko Island, situated in the northern arm of the bay, is Godhavn, the capital of, the northern inspectorate. Lastly, in lat. $72^{\circ} 50'$ N. and thus the most northerly settlement in the world, is Upernavik. The people who dwell in these Danish colonies are Eskimo, who number over nine thousand, and Danes, who do not perhaps exceed three hundred. The scenery is wild in the extreme. Where the ice does not reach the coast in the form of glaciers, high, rugged, bare rocks rear their splintered heads and precipitous sides; a narrow, muddy plain may be found here and there, most of the material having been brought down by the glaciers as they ground and gouged their way over the underlying rocks; and frequently one can meet with a regular delta of glacier deposit. Such vegetation as exists is composed

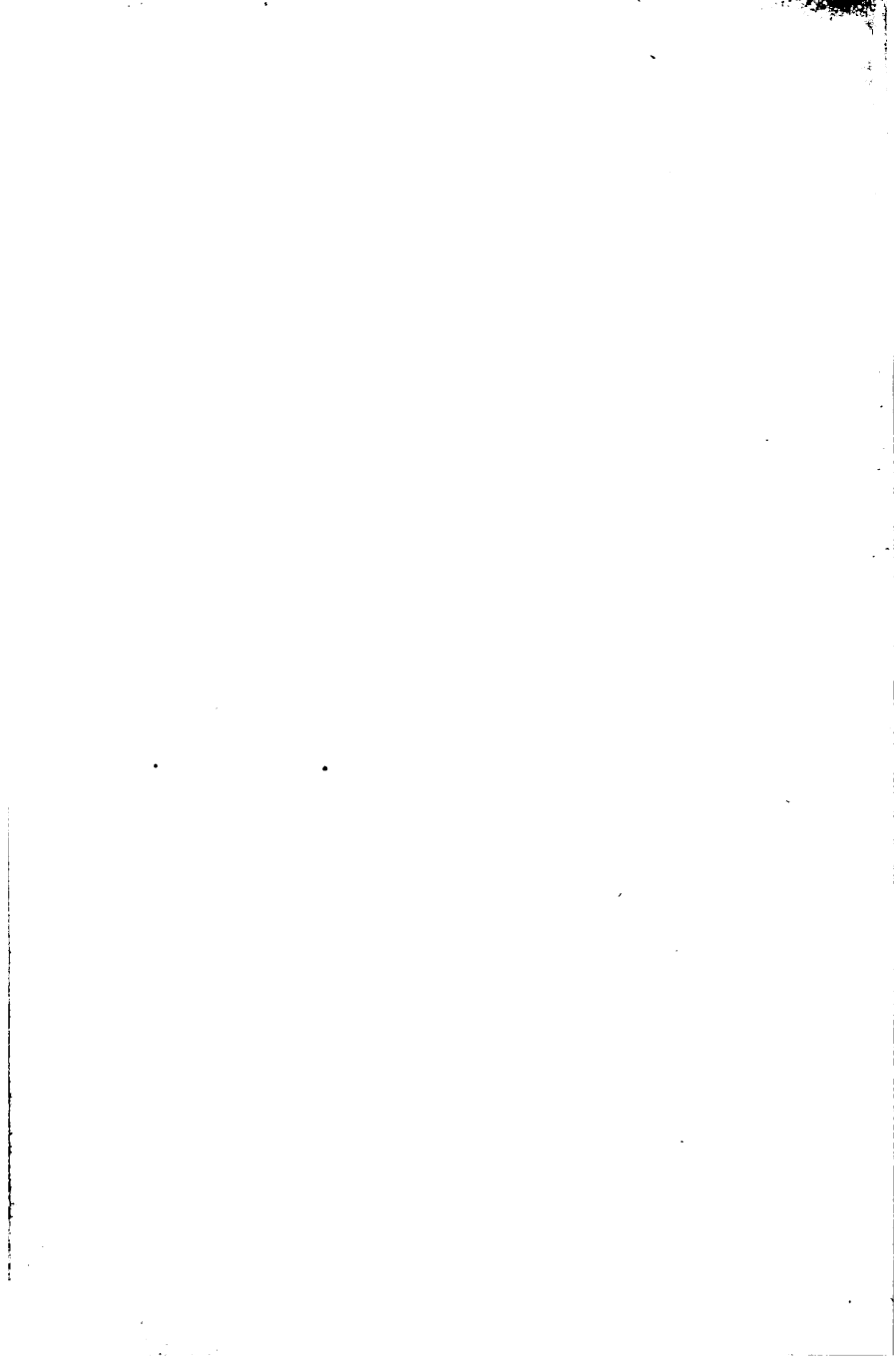
chiefly of dwarf creeping birches and willows, and by mosses and lichens and heather. Small beds of coal, and a considerable deposit of cryolite—from which the familiar aluminium is extracted—are also found. The chief occupation, however, of the people is fishing; and they send away to Europe considerable cargoes of sealskins, whale and seal oil, and eider-down.

Nansen's goal was Christianshaab, in the northern inspectorate; and had he been able to land at the Sermilik Fjord on the day when he left the *Jason*, it is quite probable that he would have made that port. But after having been carried by the current two hundred miles south of that spot, and having with great labour regained about two-thirds of the ground lost, he thought it better, as the summer was so rapidly waning, to strike inland from Umivik—nearly two degrees further south. From here the route to Christianshaab would be north-west (and a little to the northerly), and this route he followed until a succession of strong northerly winds, bringing snow storms or icy rain with them, compelled him to reconsider his decision. It was then that he determined to alter his course, and make, not for Christianshaab on Disko Bay, but for Godthaab, near the well-known Ameralik Fjord. Greenland is of course much narrower in this lower latitude, and the distance was therefore shorter; but the difficulty of reaching Godthaab on emerging on the west coast—necessitating a voyage of fifty miles—was much greater than that of reaching Christianshaab, which is situated on the coast and easy of access from the immediate interior.

After a few days of preparation, and having stowed the boats away in a rocky cleft, the expedition marched inland on August 15th. At first they marched by night, as the summer sun made the snow so soft that pulling the sledges, loaded up to about two hundred pounds, was too laborious. They were on a continual

ESKIMO AND THEIR APPLIANCES.





ascent, too, climbing slowly up from sea-level to several thousand feet. By morning they had only covered some two or three miles, although they had ascended five hundred feet. They slept and rested all that day, and at evening began their march again; but, as the night was very dark, they had to pitch camp again after a few hours. At dawn they started again—this time in a heavy downpour of rain which rapidly wetted them to the skin in spite of their putting on waterproofs, which were not proof against water. Nansen and his party must have reflected sadly over the irony of nomenclature; for what, indeed, is in a name?

The ice began to be more troublesome. Crevasses, wide, deep, and stretching far on either hand, were difficult to negotiate, and much time was spent in finding some snow-bridge by which they might cross. Often, too, the smaller crevasses were hidden by drifted snow, and until the leader fell suddenly through no sign of the crevasse was visible. Each man was firmly attached to his sledge by a good rope, and the sledge was so long as to be usually a safe hold for him when he fell. Each carried, moreover, a long pole, and by placing this across the crevasses from edge to edge it was generally an easy matter to scramble out again. Occasionally, however, bad falls were experienced.

At noon, August 17th, they encamped; the rain-storm having increased in violence and the snow become so soft as to be almost impracticable. They raised their tent with some difficulty, and placed their poles and ski under the canvas floor in order to keep the wet snow further off. For three days they were compelled to keep within the tent, so furious and intermittent was the storm.

On the 20th, however, the weather lifted, and they started once more. The crevasses proved difficult at first, but after a while, going, though rough, was fairly rapid.

On the 21st they pushed on even more quickly, and on this day left the standing pools of drinking water—from the melting snow—behind. Henceforward there was no drinking water to be met, and they had to melt the snow by artificial means. Each man carried under his clothes, and upon his chest, a large flat flask which he kept filled with snow, trusting to the warmth of his body to melt it. Water for cooking purposes was melted in the "copper" of the alcohol stove. They had now reached an altitude of three thousand feet above the sea; before them spread what seemed a fairly easy stretch of snow and ice, unbroken save by the occasional groups of sharp peaked rocks which are known as "nunataks." But progress was still slow, as may be gathered from the fact that though they started at 2 a.m., on August 22nd, they had only covered a distance of between three and four miles by nine o'clock.

The ice was rough—blown or broken into waves, with difficult ascents and steep slopes—and the continued strain began to tell. And then came a long, steep ascent, which, although several men pulled one sledge up at a time, sapped nearly all their remaining strength. They were rewarded, however, when reaching the summit, by a wide open plain in front of them whereon the snow lay hard and frozen, and in the next stage they covered some ten miles. It was now that they abandoned marching by night, the frost having got much more severe, and the snow being in even better condition by day than at night.

However, by way of lightening the sledges, Nansen came to the conclusion that some oil-cloth they had brought to preserve their sleeping bags from wet might be dispensed with; but, not to waste anything, he suggested that it might be used as fuel, and thus heat some water for them, at least. This seemed to the party just one of those "happy thoughts" which are as oases in the sad desert of human ex-

perience, and it was at once put into practice. Nansen has written so humorous an account of this, their first oil-cloth fire, that I will quote a portion of it.

"The fuel burned bravely; the flames rose high . . . and shed a fine glow . . . on the six figures, which were grouped around, and sat gazing at the blaze and enjoying the real solid comfort of a visible fire. It was the first time we had had a fire of this sort inside the tent, which wanted something of the kind to make it really cosy. But all the joys of life are fleeting, and none have I known more fleeting than that which comes from burning oil-cloth in a tent which has no outlet in the roof. Our fuel smoked to such an extent, that, in the course of a few minutes, our little habitation was so full that we should scarcely have been able to see one another if we could have kept our eyes open, which we could not do, as the pain caused by the fumes was simply insupportable. If there be a mortal who has seen the inside of a barrel in which herrings are being converted into bloaters, he will be able to form some idea of the atmosphere of our tent. Our pleasure at the sight of the fire had long died out; the eye that managed to open could only see a faint light glimmering far away in the fog."

This sooty experience did not add to the cleanliness of their faces, which had not been washed since they left the *Jason*! They had had no water to spare for one reason, and, for another, washing the face would have been attended by serious inconveniences, owing to the glare of the snow-fields blistering the skin. The pain which would have been caused was considered a sufficient reason for this abstinence from cleanliness, and, I must say, when I saw Nansen on his return from Greenland, he seemed to have thoroughly resumed the daily ablutions of civilised life, and, indeed, with his fresh complexion, was cleanliness personified! As he said himself, many people wash

for the sake of others; *they* were not likely to meet any one on the Inland Ice. Moreover, it was for their own sakes that they had abstained from washing. In the interior of Greenland, water will turn to ice in a minute or two; your fingers will stiffen with frost if wetted for the same time; and your face will freeze as you wash it. Adding this to the skin-peeling influence of water, the want of water, and the absence of discomfort arising from dirt in so cold a clime, we have a fairly strong case for two-and-a-half months of uncleanness!

On August 24th and 25th they again had steep ascents and loose difficult snow. Moreover, the wind now blew in their faces, and with ever-increasing strength. It whirled up the snow and swirled it down the long white slope with furious force. With their heads shrouded in their hoods, the little line of explorers slowly and painfully plodded on, and were glad enough when the night came and camp was pitched. The wind continued, and the next morning, when they awoke, not only were the sledges and tent half buried in the drifts, but the fine particles of snow had penetrated the tent, covered their sleeping bags, cooking utensils, clothes, boots and what not. But although the storm was not spent, the work of the day had to be done. Steeper and steeper became the ascent, more and more deep the snow. They had now reached an elevation of about six thousand feet, and the cold was intense. The wind was so strong, and it blew along before it such blinding clouds of snow, that progress was next to impossible. At last, Nansen was obliged to face the probabilities of their ever reaching Christianshaab, and certainly they could not reach that port in time to catch the last home-bound ship before the winter. Hoping to escape this winter, and feeling certain that in the teeth of this wind they could not make Christianshaab, he decided to alter the course, which had been north-west, to nearly south-west, and so make Godthaab, the capital

of the southern inspectorate. The journey would be shortened it is true; but, on the other hand, there would be a gain of interest, seeing that the former attempt to cross the Inland Ice had made its nature for some distance from Christianshaab well known, while that lying behind Godthaab was entirely unknown.

To Godthaab, accordingly, was the course altered, although, owing to their map of the western coast being incorrect, they made a needless *détour* in order to escape the ice-falls of great glaciers which subsequent exploration proved not to exist.

For some days the change of course enabled them to make use of the wind, but when that dropped the steady pulling of his sledge kept every man fully employed during the hours of his march. Snow blindness—curiously enough—only affected the Lapps, and them through their own lack of precaution. The continual use of their tinted spectacles saved the rest of the party from this extremely painful malady, and the red gauze veils (which Nansen found of more service than the usual blue or green) preserved their faces from over-peeling. The snow, meanwhile, was so soft that the Norwegians took to Indian snow-shoes, but it gradually improved, and on August 30th they changed to their ski, which they used continuously until they reached the west coast.

For many days they marched along the lofty plateau (eight thousand feet) that they were now crossing. "Flatness and whiteness," says Nansen, "were the two features of this ocean of snow; in the day we could see three things only—the sun, the snowfield, and ourselves. We looked like a diminutive black line feebly traced upon an infinite expanse of white. There was no break or change in our horizon, no object to rest the eye upon, and no point by which to direct the course. We had to steer by a diligent use of the compass, and keep our line as well as possible by careful watching of the sun and repeated glances

back at the four men following, and the long track which the caravan left in the snow. We passed from one horizon to another, but our advance brought us no change."

In his address to the Royal Geographical Society he dwelt on the strange beauty of the scene at night. The sunsets were glorious, and after their glow had died away the ever-changing "northern lights" scintillated throughout the night. They would sweep across the sky like a terrible fire—as if the heavens were about to be rolled up—and now they would suddenly shrink up together at the pole, as if swept by an irresistible power, and there flit and burn until, as suddenly as they had appeared, they would disappear—in a twinkling—and the night would look down upon a white world out of which all beauty and radiance had gone.

The cold endured at this stage of the journey was intense. On some nights the temperature fell between 86° and 90° Fahr. below freezing point; and inside the tent, in spite of its six sleepers and of their cooking there, it would be as low as 72° below freezing point! In the morning, though snugly ensconced in carefully closed fur bags—three in one bag—they would find a crust of ice and rime round their heads, owing to their breath having frozen even there. Their beards froze so tenaciously to the skin that it became difficult to move the lips to speak. Then came the frost-bites: now the nose would harden and have to be well rubbed with snow; then the throat, then the hands, and then, the bitter cold and wind finding their way through the clothes, even the stomach would be frost-bitten.

On September 6th a stormy wind rapidly developed into a gale, and drove the snow with such fury that it was with the greatest difficulty they raised their tent; the snow was driving so strongly that they were unable to cook anything. So they got into their sleeping bags, and ate their biscuit and dried meat

there. In the middle of the night one of the tent ropes broke, and the weary sleepers turned out and supported the weakened side as best they could. When morning broke they looked out of the tent door: sky and land were a vast sea of whirling snow! After a while the wind suddenly dropped; for a short time there was a perfect stillness and calm; then the wind came from the opposite quarter, and with redoubled fury. Propping up the tent with ski, and endeavouring to make it snow-tight with clothing, the little band of explorers crouched down in their fur-beds and waited for the rage of the tempest to pass by. The next morning the wind had dropped, but before they could start they had to get out of the tent, which was so buried in the snow that "only the ridge of the roof remained above." The sledges, of course, were completely buried, and had to be dug out.

The days followed one another with the more rapidity because they were so much alike. After breakfast they would clean the sledge runners, and perhaps take an observation with the boiling-point thermometer, and then the word to march was given. When they had been going for about two hours a short halt would be called, and a cake of meat-chocolate or some biscuits would be served out. Another advance, and another halt—this time for dinner. Again an advance, and again some light refreshment. Then they marched on steadily till camp was pitched for the night. At midday they would take observations with the sextant and theodolite, and this not only required great care, in order to be certain of their exact position and enable them to construct an accurate map, but in the intense cold was particularly uncomfortable and even dangerous work. For, as Nansen found out, one cannot use these instruments accurately with thickly gloved hands; and directly the fingers touched the metal there was every risk of their being frozen to it. However,

in spite of all the hardship and toil, there were pleasant intervals of relaxation and rest. The evenings in the tiny tent, with hot chocolate to drink and for the smokers an occasional pipe to smoke, must have seemed—as indeed they were—hours of peculiar and rare enjoyment.

They were now near the beginning of the western slope of the incline, which would not only make their going comparatively light, but eventually lead them back to civilisation, food, warmth and safety. On September 11th this edge was reached—though they were still nine thousand feet above the sea—and then they began to descend. As they advanced the fall in the ground became more marked, and the temperature rose nearly to zero! On September 17th they were met by a snow-bunting, the first sign of life they had seen for weeks, the first welcome of the western coast. The wind being strong behind them they turned the sides of the tent into sails, and lashing the sledges together two and two (the large sledge had been abandoned some time before), they started off merrily enough; and although a few minor mishaps occurred at first, and now and again a crevasse yawned dangerously near, sailing the sledges proved a great success. The pace at times was very rapid, and the steerer, who stood in front on his ski and kept the sledge at a proper distance with a long pole—which acted as rudder—had plenty of work to do to avoid bad snow and rough ice. Other and more serious obstacles had also to be watched for. When rushing down a long steep slope in the growing dark of the evening, Nansen perceived a deep looking shadow lying in front. “Unconcernedly,” he says, he steered ahead. “The next moment, when I was within no more than a few yards, I found it to be something very different, and in an instant swung round sharp and brought the vessel up to the wind. It was high time, too, for we were on the very edge of a chasm broad enough to swallow comfortably sledges, steersman and passengers.



The Canvas Boat

Coasting

Scudding
before the Wind

'Ski'

W. G. Smith



Another second and we should have disappeared for good and all. We now shouted with all our might to the others, who were coming gaily on behind, and they managed to luff in time."

The snow now became dangerous, and crevasses more frequent, as the glaciers were broken by the irregularity of the slope. But at last, on September 19th, the cry, "Land ahead!" first shouted by Balto, the younger of the Lapps, was taken up by the whole party with the greatest zeal. And land ahead there was—a long mountainous ridge to the west. With hopes high and spirits raised they pressed on. Night fell, but on they sailed; down the great snow-slopes they slid, and, as the wind rose, with ever-increasing speed. Nansen went flying on before on his ski to test the snow and to look out for crevasses; behind followed the sailing sledges, rushing with their loads down the smooth snow. The moon rose and the whole scene was illumined: the dark figures and sails and sledges flying before the wind were the only shadows in that world of whiteness, and must have seemed—had any one been there to gaze—like unhappy ghosts fleeing to the Plutonian shore. But soon the crevasses yawned too wide to be leapt, and, navigation on this frozen land-sea becoming too dangerous even for the bold spirits of these Vikings of a latter day, a halt was called and the camp was pitched.

The following morning they obtained a good view of the mountainous country south of Godthaab, and after feasting their eyes on this unaccustomed sight, started with all speed down the crevassed slopes. To judge from Nansen's detailed account of this part of the expedition, it is a matter for surprise that they were not many times over engulfed in the numerous crevasses. But all went well with them, and on the 21st they once more came upon fresh drinking water—a great event when it is remembered that they had been on very short commons for a month, and had

never, or hardly ever, ceased to feel thirsty during that time. During the next few days they were attempting to discover and follow the better routes down a fearfully crevassed series of glaciers to the fjord; and though many narrow escapes were recorded, they at last safely arrived at the foot of the southernmost glacier—where it was lost in a frozen mountain lake, over which they crossed to the rocks on the other side.

The Inland Ice was behind them! "Like school-boys released," they rushed to and fro with delight. "Words cannot describe what it was for us only to have the earth and stones again beneath our feet, or the thrill that went through us as we felt the elastic heather on which we trod, and smelt the fragrant scent of grass and moss. Behind us lay the 'Inland Ice,' its cold grey slope sinking slowly toward the lake; before us lay the genial land. Away down the valley we could see headland beyond headland, covering and overlapping each other as far as the eye could reach. Here lay our course, the way down to the fjord."

Their camp that night was a merry one. Out of the heather that grew in profusion, they made a large fire, and then lay down all around it—the smokers stuffing their pipes with moss, and enjoying the pipe as they had never enjoyed a pipe before. It was an evening of rejoicing and rest: a memorable hour.

On September 26th they came in sight of the fjord—the Ameralik Fjord—and shortly afterwards pitched camp. The problem now to be solved was the making of a boat which would take two of them to Godthaab, to complete their voyage, and to have a large boat sent for their comrades and stores. With nothing but the canvas of the tent, a few bamboos, a staff, and some willow bushes which grew near and might give them some sticks, these gallant fellows started on this work.

Sverdrup, as a sailor, distinguished himself in sewing and patching up the canvas, and Balto the Lapp helped; Nansen wandering about, meanwhile, in search of suitable lengths of willow-wood. They began work in the morning, and by night the boat, such as it was, had been built. (See illustration on page 309.) Rough and irregular she was without doubt: queer of shape—like the fore-part of an ordinary boat, lacking waist or any sheer; and, for stern, a mere straight piece of canvas—as if she had been cut sharply across; but, nevertheless, she carried Nansen and Sverdrup safely for fifty miles down the fjord and along the coast to Godthaab. For sculls they had short lengths of bamboo, with a forked willow-branch, covered with canvas, for blade. The thwarts were made of the light ash rods which had been the theodolite stand, supplemented by one or two thin strips of bamboo—narrow and slender seats, indeed. This little coracle, about eight feet in length and four feet in width, took in a deal of water through the canvas, but floated well and proved a fair substitute for a boat or canoe.

They were now ready to start, but it was a bad spot for launching. The stream which ran down the bottom of the valley to the fjord proved uselessly shallow, and the mud delta which it had formed outside the valley, and between it and the fjord, was soft and boggy. However, by dint of carrying their baggage to the firmer parts, and hauling their little boat across the delta—though they often plunged up to their hips in the soft mud—these plucky voyagers, at the end of a long day's work, found themselves ready to put to sea. The little boat, despite her leaking, was surprisingly fast, and although the first day's navigation did not bring them very far, they had gained experience and confidence in their canvas craft. That night, when camping, they held high carnival over some half a dozen large gulls which Nansen had shot from the boat, and which, after their

long abstinence from fresh meat, seemed very choice game indeed.

The following day a head wind made progress slow, and the lightness of the boat made it doubly difficult to forge ahead. So they put into shore and camped. When the wind fell, towards evening, however, they again embarked and crossed from the south to the northern side of the ever-widening fjord. The next morning (October 1st) the weather was not favourable, and very little way was made; but at midnight, after a short bivouac, they took to the boat again, the wind having dropped and the weather being fine. Nansen writes: "We made our way quickly along the shore in intense darkness. The phosphorescence of the water was almost as brilliant as anything that tropical seas can show. The blades of our oars gleamed like molten silver, and as they stirred the surface the effect was seen in the glittering radiance that stretched far below. The whole scene was very grand as we passed along under the beetling cliffs, where we could see scarcely anything but the flashes of phosphorescence which flitted upon the water round about us, and danced and played far away in the eddies of our wake."

All the next morning they rowed on, and at noon landed to dine. Gulls, guillemots and sea-urchins formed the staple dish, followed by soup—the water in which they were cooked. Crowberry bushes near by provided an excellent dessert. During the afternoon they emerged from the fjord, and entered the open sea just as a glorious sunset lighted up the wild but beautiful coast. It was a scene which appealed with special force to these wandering Vikings, who had led the roughest of lives during the past few months. "The vision stopped us, barbarians as we were, and deprived us of speech and power of action. A feeling of home and familiar scenes came over us; for just so lie the weather-beaten islands of the Norwegian coast, caressed by flying spray and summer haze, the outskirts of the

fjords and valleys that lie behind. It is not to be wondered at that our forefathers were drawn to this land of Greenland."

The current now ran against them, and the work of rowing, with the slightest of sculls and on the frailest of thwarts, became hard and unfruitful. After some hours' work, therefore, they camped for the night, supping plentifully on the provisions they had brought with them, well knowing that their goal was nigh. That night was the last they were to spend outside of civilisation.

The next morning, with the wind in their favour, they made rapid headway, and before long they opened up a slight bay, on the shores of which they beheld for the first time since leaving Iceland a collection of houses. It was not Godthaab—that lay a little farther on—but New Herrnhut, one of the colonies founded by the German Moravians, and named after their own beloved Herrnhut in far-away Saxony.

The voyagers were pressing on to Godthaab when a head wind sprang up, and this determined them to land, and march overland to their ultimate destination. So they turned the head of their little craft shoreward, and in a few minutes leaped out on to the beach to find themselves in a crowd of Eskimo.

In the midst of all the confusion, a curious incident occurred, which brings to mind Stanley's famous meeting with Livingstone in the heart of Africa. On that occasion—as will be remembered—though he wished to speak all that he felt after searching for and ultimately finding the lost explorer, he could not summon up courage to say anything but the stereotyped formula: "Dr. Livingstone, I presume?" So, while Nansen was standing over the tub which had brought them safely from the foot of the Inland Ice, a young Danish official advanced and politely inquired who they were.

"My name is Nansen," was the reply.

"Oh, allow me to congratulate you on taking your doctor's degree."

To say the least, it was comical. Nansen had taken his doctorate just before leaving Norway, and the young Dane, comparatively recently from Copenhagen, had read of the fact. The mighty feat carried out since was of course as yet unknown to him; to Nansen, who had just accomplished the virgin voyage across the interior of Greenland, his doctor's degree had become a thing of nought, and been buried in oblivion during the recent stirring days of daring and danger.

However, the Dane, who proved to be acting as superintendent in that official's temporary absence, gave them a warm welcome to the west coast, and informed them that Godthaab, his headquarters, was close by. The Moravian missionary whose house—half-church, half-dwelling—is perhaps the most conspicuous building in New Herrnhut, insisted on the voyagers accepting a substantial form of welcome before starting for Godthaab, and they accordingly had another novel experience: "It was a queer change to be sitting at a table again, and before a white cloth. . . . The mere sitting upon a chair was a thing to be remembered."

The wind had now brought up rain, but as they were weather-proof by this time they walked to Godthaab without any further delay. But the little capital of the colony had heard of their arrival, and was already making ready for a grand reception. The doctor and missionary of the town came over to meet them, and then, surrounded by a small but continually increasing escort, Nansen and Sverdrup journeyed the last league of their eventful journey. Suddenly, as they rounded the shoulder of a hill, they came full upon the town, lying between hills and on the shores of a small bay. Godthaab lay below them: their journey was at an end.

When they had left the *Jason*, that hospitable sealer had given them such a salute as their carronade could provide; now that they entered Godthaab, that equally hospitable town extended to them the like honour. Amid the firing of cannon and the cheering of Eskimo, Nansen and his companion marched to the Government House, and were again welcomed to the colony. The excitement that prevailed was intense, and we may be quite sure that this will long be remembered as the most eventful day that Godthaab has seen during the last century. The Eskimo were never tired of crowding round "Angisorsuak"—the very big one—as they called Nansen; and "Akortok"—he who steers a ship—as they very appropriately styled that gallant sailor, Sverdrup.

The excitement increased when it was known that four more of these great travellers were left behind at Ameralik Fjord, and that they were awaiting the coming of a boat from Godthaab to bring them into safety. The knowledge, too, that there were Lapps—men who possessed reindeer and roamed the mountains with them—was of special interest to the Eskimo, who could sympathise the more fully with those who had something so especially in common with themselves. Several delays occurred, however, before these four were fetched from the head of the fjord where they were patiently encamped; and it was not until October 12th that they arrived in a Godthaab whaler, surrounded by a fleet of kayaks, whose navigators were running imminent risk of capsizing in their frantic efforts to get nearest to "the men with the great beards."

In Godthaab Nansen and his party remained during the winter, the captain of the *Fox*, the last ship to leave the west coast, and by whom letters were sent announcing their safe arrival, not daring to come north at that time. These letters were sent by special kayaks, and just caught the ship as she was leaving for Europe. Nansen notes that the postage of the

two letters that were sent amounted to £17! But the time was well spent in exploring the country round, and in studying the habits of the Eskimo; and if any one wishes to read a thoroughly good, simple, and unvarnished account of this curious people; they would do well to turn to the admirable account which Nansen gives of them in his book.

The book, indeed, which he has written about this first crossing of the Inland Ice of Greenland is an excellent piece of work. Without straining at effect, the descriptions are dramatic and life-like; the facts recorded are just those simple every-day facts of life in the interior that we want to know; many of them, however, are of the highest scientific value. The book is written in a very agreeable manner, the literary quality is good, and there is a deal of humour in its pages. Among travellers' books it must take a high place; there is no "tall talking," no bombast, no wild opinions, no absurd theories. The language is simple, and the matter crammed full of interest. The author is a diarist, and a scientific one, too; but whether he be writing down some simple fact about his breakfast, or whether he be drawing conclusions from his meteorological observations, he is ever and always pleasant to follow, and a delightful companion. Sverdrup, Dietrichson, Kristiansen, Balto the boisterous and Ravna the silent—we know them all. They are all capital fellows, each in his own way. Sverdrup, too, is so reliable and expert, and Dietrichson so conscientious an observer and faithful a lieutenant, and Balto so amusing a wit, that by turns we admire and laugh, and do not know whether we admire or laugh the more. Balto kept a diary of the events of the march, and Nansen has been good enough to us to incorporate portions of it in his own book. It is intensely quaint and amusing. And Ravna, the oldest of the party, and who never seemed to forget his home among the mountains of Lapland, and who longed the while so passionately for the reindeer he loved so well

—we can see him trudging manfully down the steep valley to the Ameralik Fjord, with a load double the size of anybody's else, because he would not leave his bag of clothing and personal effects behind, nor abandon his ponderous New Testament in the Lapp tongue. When at last they arrived at Christiania, and entered the harbour with hundreds of boats, ships, and steamers, skimming and steaming out to them and round them to bid them welcome and do them honour, Ravna was only slightly moved from his usual unperturbed, almost melancholy apathy: "Yes, it is fine," said he, when he had been asked if all these rejoicing people did not form a fine sight, "very fine; but if they had only been reindeer!"

Nansen arrived at Godthaab on October 3rd, 1888; he stayed there in winter quarters, receiving the most hearty hospitality, till April 16th, when he sailed in the *Hvidbjörnen*, Captain Garde (of east coast exploring fame), and on May 30th the good ship entered Christiania amidst a scene of the greatest rejoicing and excitement. Nansen, who had at last achieved the often attempted journey across the Inland Ice, who had shown a determination which was heroic and a pluck which was indomitable; Nansen, the young doctor of science in the university of Christiania, and now the man whose name had been placed among the great explorers of an age which has almost grown accustomed to exploration on the largest scale, and of the most gallant character—Nansen, with the valour of a Viking, and with the proud pioneering spirit of those hardy Norsemen of old, had returned triumphant to his home, and brought all who went out with him in safety back. Little wonder that his countrymen knew not how most to do him honour! Little wonder that Christiania decked herself with flags and sent forth her thousands to shout him welcome home again!

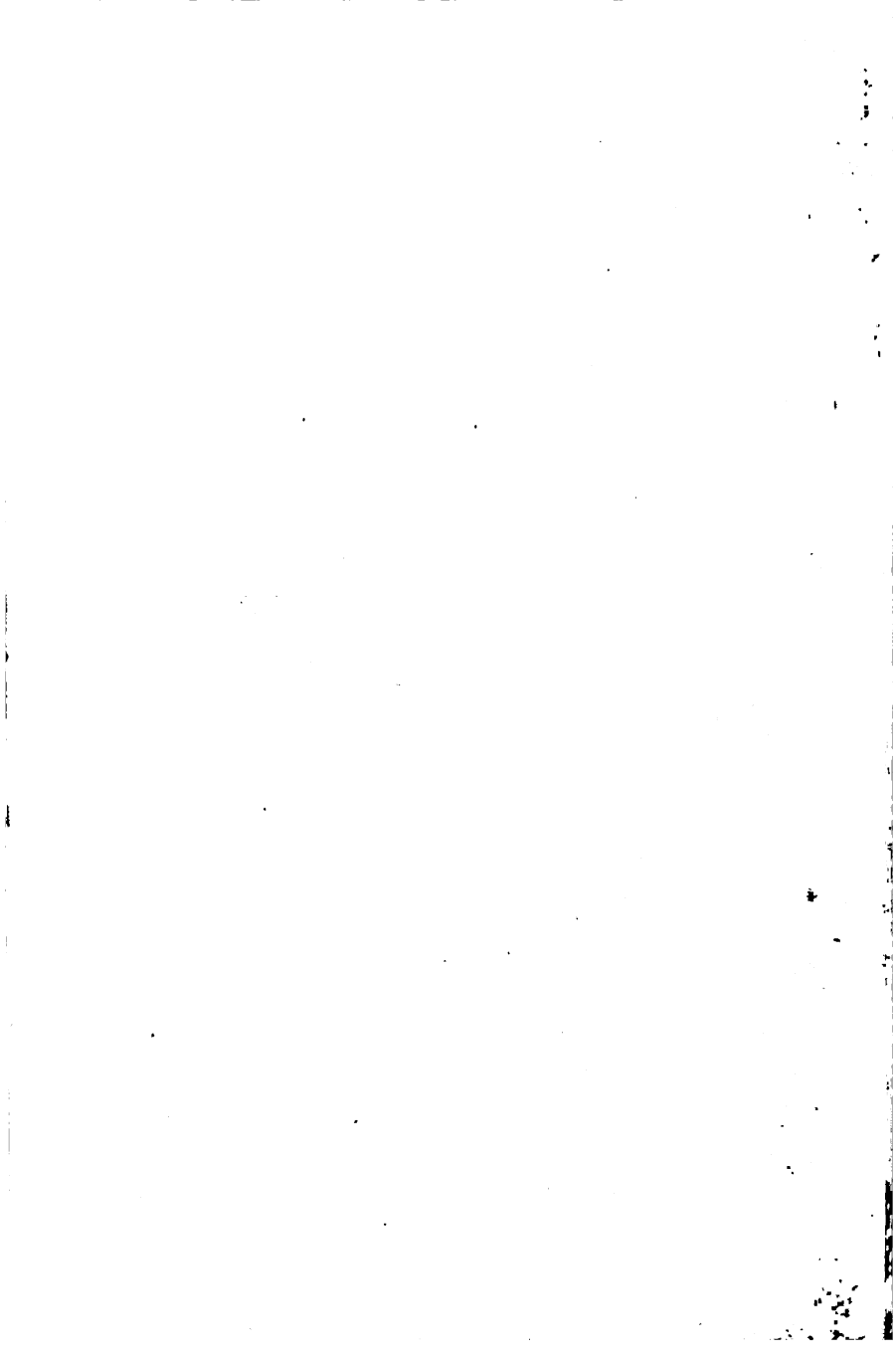
And what said the Eskimo, among whom he had

found so many friends in far-away Godthaab, overlooking those arctic seas?

"Now you are going back into the great world from which you came to us you will find much that is new there, and perhaps you will soon forget us. But we shall never forget you."

THE END.





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